

## 1983 FARLEY NUCLEAR PLANT EMERGENCY EXERCISE

February 9, 1983

### I. Participating Organizations

State of Alabama and Houston County, Alabama  
State of Georgia and Early County, Georgia  
State of Florida (Communications level participation only)  
Alabama Power Company

### II. Purpose

- A. To meet the requirements of 10CFR50, Appendix E, 44CFR350.9 and NUREG-0654/FEMA-REP-1, Rev. 1.
- B. To conduct a full-scale exercise that will include the mobilization of Alabama Power Company, state and local personnel and resources adequate to verify the capability of participating organizations to respond to an accident scenario requiring response.

### III. Objectives

#### A. On-site Objectives (Alabama Power Company)

1. Demonstrate that control room staff can assess the event, classify the event, take corrective measures to control the event and activate emergency response procedures.
2. Demonstrate that plant staff can activate and staff the Technical Support Center (TSC) and perform accident response activities including:
  - a. Dose Assessment
  - b. Off-site notification and protective action recommendations.
  - c. Reclassification of emergency status
  - d. Personnel Accountability for all personnel on-site
  - e. Radiation Monitoring Team (RMT) Dispatch and Control
  - f. Site access control and admittance of essential personnel
  - g. De-escalation of emergency class
3. Demonstrate the capability to turnover Emergency Operations Facility (EOF) functions to the EOF staff when EOF is activated and staffed.

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FNP Emergency Exercise

Page Two

4. Demonstrate the capability to augment EOF staff with non-essential plant personnel.

B. Off-Site Objectives (Alabama Power Company)

1. Demonstrate that corporate staff can be activated in a timely fashion and dispatched to FNP.

2. Demonstrate that Flintridge Emergency Operations Center (EOC) staff can provide initial support for:

- a. EOF activation
- b. Logistics
- c. Support Organization Notification
- d. Briefing of company management
- e. Monitoring news media activities

3. Demonstrate that EOF staff can:

- a. Assume Dose Assessment function & RMT direction and communication function from TSC staff
- b. Assume Logistics, Manpower and Engineering function from Flintridge EOC
- c. Prepare and coordinate news releases and activate emergency news center
- d. Shift to Recovery Phase Organization

C. Off-site Plume Exposure Pathway EPZ Objectives  
(States of Alabama and Georgia\* and Counties of Houston and Early)

1. Demonstrate that response organizations can alert, notify and mobilize emergency response personnel.
2. Demonstrate that the emergency operations centers can be staffed in a timely fashion.
3. Demonstrate that the states can activate emergency worker assembly points, dispatch radiation monitoring teams in a timely manner, provide assessment of a simulated airborne release and communicate their assessment to the EOC.

\*State of Georgia plans to full-scale exercise with Plant Hatch and therefore will limit activation of the GA state EOC to that level required for realistic interplay with the other fully activated organizations.

4. Demonstrate that the states' Radiation Control staffs can assess the accident and make appropriate recommendations to the states' decision makers.
  5. Demonstrate that decisions can be made with regard to protective measures for the plume exposure pathway EPZ.
  6. Demonstrate that the counties can dispatch personnel to all appropriate access points that the simulated evacuation would call for and take other measures involved in the simulated evacuation.
  7. Demonstrate that adequate communications can be maintained between county EOC and field units.
  8. Demonstrate the Houston County mass care facility can be activated and staffed in a timely fashion to support a simulated evacuation.
- d. Off-site Ingestion Pathway EPZ objectives\*\* (States of Alabama, Georgia, and Florida)
1. Demonstrate that decisions can be made with regard to protective measures for the ingestion pathway EPZ.
  2. Demonstrate that collection and analysis of ingestion pathway EPZ dairy products can be initiated.\*\*
- e. Joint objectives (Alabama Power Company, States of Alabama, Georgia and Florida, Counties of Houston and Early)
1. Demonstrate that the parties can coordinate all releases of information to the media.
  2. Demonstrate that the parties can coordinate the protective measures to the public (recommendations for protective action, activation of the Prompt Notification System).
  3. Demonstrate that the parties can carry out free play in decision making with regard to protective measures for the plume and ingestion pathway EPZs.

#### IV. General Exercise Scenario

The simulated accident condition will begin as an Alert Emergency and progress over a 2 to 3 hour period to a General Emergency.

Simulated radioactivity releases will be selected to require simulated evacuation of portions of the 10-mile Emergency Planning Zone and ingestion pathway EPZ sampling.

\*\*Ingestion pathway protective measure actions will be simulated to a communications level only.

See Attachment 1 for scenario details.

Wind direction will be from the north-northeast toward the south-south-west. One year old meteorological data will be utilized to determine frequency, magnitude and timing of changes in meteorological parameters.

See Attachment 2 for meteorological data.

V. Drill Limits

The drill will begin at approximately 8:00 a.m. and last a maximum of 8 hours.

The State of Alabama, Houston County, Alabama and Early County, Georgia will participate at a full scale level including activation and staffing of EOCs and will perform functions identified in their emergency plans. The State of Alabama will simulate activation of its mass care facilities in Houston County. The State of Georgia will participate as necessary to simulate interfacing and decision-making with the other organizations and will dispatch at least one Radiation Monitoring Team to Early County and a representative to the Houston County CEOC. The states of Alabama and Georgia will simulate ingestion pathway sampling at a communications level but will not obtain or simulate analysis of samples. The State of Florida will exercise at a communications level only and does not plan to dispatch a representative to the Houston County CEOC.

Following proper coordination, the prompt notification system will be activated by Alabama and Georgia.

Alabama Power Company will activate its Technical Support Center, Flintridge (corporate) Emergency Operations Center, its on-site Emergency Operations Facility and its Emergency News Center.

ATTACHMENT 1

1983 RADIATION EMERGENCY EXERCISE SCENARIO

1.0 INITIAL PLANT STATUS

1.1 Unit #1 is operating at 100% equilibrium conditions, middle of core life, cycle #4, with 450 ppm boron concentration. The RCS has moderate activity due to some clad failure.

1.2 LCOs

1.2.1 Only one charging pump is operable (1-A). 48 hours remain in action statement time limit.

1.2.1.1 1-B has failed motor.

1.2.1.2 1-C has failed gear box.

1.2.2 RE-600 failed detector. LCO in effect for 12 days.

2.0 EQUIPMENT AND SYSTEM STATUS

2.1 A, B, & E steam dump valves are isolated due to, (1) excessive seat leakage on A & B, and (2) a positioner malfunction on E.

2.2 All ESF components are OPERABLE per last surveillance testing. (Exceptions are 1B & 2C charging pumps and RE-600.)

2.3 Waste gas system is aligned and operating in "Automatic" in the "low pressure" mode with no inoperable equipment.

2.4 Liquid waste systems are at normal inventory levels and all processing equipment is available.

2.5 Auxiliary building main exhaust fan 1-A is out of service due to a failed fan bearing.

3.0 MAINTENANCE ITEMS

3.1 Removing needed parts from 1-B charging pump to repair 1-C charging pump's gear box. Approximate repair time-12 hours.

3.2 Auxiliary building main exhaust fan 1-A replacement parts are on order.

4.0 SCENARIO TIME	EVENT DESCRIPTION / PLANT STATUS	EXPECTED ACTIONS
0800	<p>1-B start-up transformer protective relay fails and causes the following concurrent events:</p> <ul style="list-style-type: none"> <li>"Reactor trip - SSPS RCP breaker power supply de-energized.</li> <li>"Turbine trip - Power &gt; P-9 and reactor tripped.</li> <li>"LOSP "B" train - start-up transformer isolated from switchyard. NOTE: At the time of start-up transformer loss, the following major components will be de-energized and subsequently restarted by B1G and B1J sequencers:</li> <ul style="list-style-type: none"> <li>1-B AFW pump</li> <li>1-A CCW pump</li> <li>1-E 600V load center</li> <li>1-D and 1-E service water pumps</li> <li>4 &amp; 5 river water pumps</li> </ul> <p>Main generator trips and "fast dead bus transformer" takes place, causing the loss of 1-B and 1-C RCPs due to start-up transformer 1-B being de-energized.</p> </ul>	<p>Control Room Personnel -</p> <p>Diagnose event and begin "IMMEDIATE ACTIONS" of EOP-7.0, "Loss of Offsite Power"</p>
0801	D/G 1-B and 2-C are running, and sequencing is complete with no failures.	<p>Control Room Personnel -</p> <p>Complete IMMEDIATE ACTIONS of EOP 7.0</p>
0802	<p>Due to steam dump status and sluggish controller operation, RCS pressure spikes high, causing a "weak" pressurizer code safety valve to open and become stuck open at approximately 25%.</p> <p>Safety injection is initiated due to low RCS pressure.</p>	<p>Control Room Personnel -</p> <p>Diagnose event and begin implementation of EOP-0, "SAFETY INJECTION"</p>

TIME	EVENT DESCRIPTION / PLANT STATUS	EXPECTED ACTIONS
0804	RCS pressure at 1400 psi and rate of change is decreasing. Safety injection and containment isolation function satisfactorily with the exception of containment mini-purge valves which fail to shut completely. One mini-purge valve (inboard valve) does close far enough to indicate closed on the monitor light box and other indications. (Any attempt to shut these valves will be unsuccessful and this effluent path will remain open.)	Control Room Personnel - Attempt to close outboard mini-purge valve.
0805	Pressurizer relief tank rupture disk blows and the following radiation monitors begin to upscale: (1) R-2 containment area 155' (2) R-7 seal table area (3) R-10 penetration room filtration discharge (4) R-11 containment atmosphere particulate (5) R-12 containment atmosphere gaseous *(6) R-27 A&B containment HI range (7) R-24 A&B containment purge exhaust (8) R-14 vent stack in line (9) R-21 vent stack off line particulate (10) R-22 vent stack off line gaseous  *HI range detector will not see an immediate increase.	Control Room Personnel - Diagnose event and implement EOP-1.0, "LOSS OF REACTOR COOLANT". Sound Plant Emergency Alarm.  Plant Personnel - Report to assembly areas and initiate accountability procedures.  TSC Management - Report to TSC and activate emergency plan (Alert Level**EIP-12).
0809	RCS at saturation conditions; temp approximately 590°F; pressurizer approximately 1450 psi. Pressure continues to decrease until break and injection flow are equal at approximately 65 gpm.	Plant Staff - Continue evacuation, accountability and TSC activation. Begin notifications.
0812	Pressurizer is filled and RCS pressure begins to stabilize at approximately 1200 psi.	Plant Staff - Continue accountability+ and notifications.

\*\*Emergency Director may decide to go straight to a GENERAL EMERGENCY level (EIP-19) if he decides 2 of 3 barriers are lost (RCS & CTMT based on R-24 A&B reading) and feels loss of third barrier (cladding) is probable.

+Following completion of accountability, personnel not participating in further exercise activities (monitoring teams, repair parties, TSC & OSC management, etc.) will be drill exempted and returned to work.

TIME	EVENT DESCRIPTION / PLANT STATUS	EXPECTED ACTIONS
0815	RCS pressure stable at 1200 psf with a break flow of 65 gpm, and slight increase in containment pressure (1.0 psig) and no change in purge valve status. These plant conditions will be maintained until 1030 hours.	Plant Staff - Continue accountability and notifications. Initiate RCS and Containment Sampling. Dispatch Radiation Monitoring Teams. Prepare to implement EIP-14, "Re-entry".  Corporate Staff - Implement EIP-111 and 118 (Corporate Activation Procedures) for activation or standby status.**
0830	Containment area monitors, purge exhaust monitors and vent stack low range monitors continue to upscale.	Corporate EOC activated and EOF staff leaves for site.
0830 thru 1030	Containment area monitors, purge exhaust monitors and low range vent stack monitors continue to upscale, stabilizing at approximately 1015. Projected and actual dose rates are very low and do not justify off-site protective action.	Corporate Staff - EOC maintains contact with TSC and Recovery Manager and notifies corporate and off-site support agencies.  Plant Staff - Obtain and analyze RCS and containment samples. Energize H <sub>2</sub> recombiners. Prepare EOF for use. Conduct re-entry with Emergency Repair Party in attempt to close the outboard mini-purge valve.*
1030	The failed code safety valves condition degrades and the leak rate increased to approximately 285 gpm. RCS decreases to 1000 psi, i.e., equilibrium break, and injection flow conditions. Containment pressure "spikes" to approximately 10 psig causing inboard mini-purge valve to open a small amount more, giving "open" indication on monitor light box for both valves.	Control Room - Continue to monitor ESF response and follow procedural guidance.

\*\*Although not required for Alert, it is anticipated that the staff will be activated. If placed on standby, the monitor will request activation due to exercise time constraints.

\*Monitor will prompt this action if necessary since inboard purge valve indication will not cause failure and repair need to be obvious.

TIME	EVENT DESCRIPTION / PLANT STATUS	EXPECTED ACTIONS
1035	The 1-A charging pump trips due to unknown reason and is re-started promptly. However, RCS pressure decreased rapidly and extensive core damage results. Radiation Monitor values take a step increase and then continue to upscale.	Plant Staff - Emergency Director declares GENERAL EMERGENCY if not previously declared. Update provided to off-site agencies. Protective Action (Evacuation) recommended. Obtain new RCS and Containment samples.
1200	Effluent release rate peaks.	None
1230 to 1300	EOF staff arrives. Plant status stable with off-site dose rates decreasing.	EOF Staff - Execute turnover per EIP-116. <sup>+</sup> Implement EIP-114 (News Release coordination) and EIP-117 (EOF Admin. Support) and assume dose assessment responsibility. Activate News Media Center.
1400 to 1500	Stable with dose rates decreasing.	Recovery Manager holds press conference at New Media Center.
1500 to 1600	Simulate time lapse. Containment integrity restored by cycling outboard valve and release terminated. Plant is stable and in process of being cooled down and depressurized. Containment inventory still high but below value representing threat to Public.	EOF and TSC Staff - Implement EIP-115 to downgrade from General Emergency to Alert.
1600 to 1700	Simulate time lapse. Containment integrity restored, release terminated, RCS cooled down and depressurized. Shutdown cooling being maintained by ECCS in recirc. mode.	EOF Staff - Implement Recovery Organization
1630 to 1700	Terminate Exercise	

<sup>+</sup>Following completion of actions expected at 1035 and turnover to EOF, TSC role will reduce to communications level. Control room personnel and OSC personnel will be drill exempted and returned to work. Monitoring teams and TSC management continue to participate as needed.

TIME N/A

CARD OPS 1

INITIAL PLANT STATUS

Unit #1 is operating at 100% equilibrium conditions, middle of core life, cycle #4, with 450 ppm boron concentration. The RCS has moderate activity due to some clad failure.

LCOs

Only one charging pump is operable (1-A). 48 hours remain in action statement time limit.

1-B has failed motor.

1-C has failed gear box.

RE-60D failed detector. LCO in effect for 12 days.

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TIME N/A

CARD OPS 2

EQUIPMENT AND SYSTEM STATUS

A, B, & E steam dump valves are isolated due to, (1) excessive seat leakage on A&B, and (2) a positioner malfunction on E.

All ESF components are OPERABLE per last surveillance testing. (Exceptions are 1B & 2C charging pumps and RE-60D.)

Waste gas system is aligned and operating in "Automatic" in the "low pressure" mode with no inoperable equipment.

Liquid waste systems are at normal inventory levels and all processing equipment is available.

Auxiliary building main exhaust fan 1-A is out of service due to a failed fan bearing.

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TIME N/A

CARD OPS 3

MAINTENANCE ITEMS

Removing needed parts from 1-B charging pump to repair 1-C charging pump's gear box. Approximate repair time-12 hours.

MAINTENANCE ITEMS (cont.)

Auxiliary building main exhaust fan 1-A replacement parts are in order.

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TIME 0800

CARD JOPS 4

ANNUNCIATOR G41 HAS ILLUMINATED

-ONE LOOP LOW FLOW OR-RCP BREAKER OPEN REACTOR TRIP-

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TIME 0800

CARD JOPS 5

ANNUNCIATOR M02 HAS ILLUMINATED.

-START-UP TRANSFORMER 1-B SUDDEN PRESSURE-

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TIME 0800

CARD JOPS 6

The Main Generator has tripped and the fast dead bus transfer has taken place.

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TIME 0800

CARD JOPS 7

ANNUNCIATOR H04 AND H42 HAVE ILLUMINATED.

-PRESSURIZER SAFETY VALVE TEMPERATURE HI - AND SAFETY VALVE 8010A,B, OR C OPEN-

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TIME 0802

CARD OPS 8

ANNUNCIATOR G14 HAS ILLUMINATED.

-PRESSURIZER PRESS LO SAFETY INJ REAC TRIP-

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TIME 0804

CARD OPS 9

- PLANT STATUS-

RCS Pressure 1400 psi and rate of change decreasing.

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TIME 0804

CARD OPS 9-A

NOTE TO MONITOR: Present this card to operator at appropriate time while he is completing EOP-O, step 4.5, verification of proper valve alignment.

Containment purge valve status

All containment purge and exhaust dampers indicate fully shut except for MINI PURGE EXHAUST DAMPER 1-CP-MV-2867B which indicates intermediate position.

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TIME 0805

CARD OPS 10

PRESSURIZER RELIEF TANK RUPTURE DISK RUPTURES.

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TIME 0809

CARD OPS 11

- PLANT STATUS -

RCS at saturation conditions 590°F, 1450 psi and break flow 65gpm.

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TIME 0812

CARD OPS 12

- PLANT STATUS -

Pressurizer solid and pressure begins to stabilize @ 1200 psi.

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TIME 0815

CARD OPS 13

- PLANT STATUS -

Pressure stable @ 1200psi, RCS solid, break flow 65gpm, containment pressure 1.0 psig.

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TIME 1030

CARD OPS 14

Safety valve condition degrades. Leak rate increases to 285 gpm. RCS pressure decreases to 1000 psig.

ANNUNCIATOR **G51** ILLUMINATES

-Containment Pressure Hi-1 safety injection reac trip-

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TIME 1035

CARD 10PS 15

ANNUNCIATOR #11 ILLUMINATES

-CHARGING PUMP 1A, 1B, OR 1C, OVERLOAD TRIP-

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## PLANT STATUS TABLE

TIME	PZR LEVEL	RCS PRESS	LP-1 WR TH/TC	LP-2 WR TH/TC	LP-3 WR TH/TC	RCP-1	RCP-2	RCP-3	CIMT PRESS	CIMT TEMP	SUMP LEVEL	SPRAY STATUS	FL 2 RECOMS A/B	B 2 MONITOR A/B	SI MODE	RNST LEVEL	H1 HEAD FLOW
0800	558 22:5	610 550				ON ON	ON	0	1.0	115	0	OFF	OFF	OFF	N/A	40'	N/A
0815	100%	1200 610 580				OFF OFF	OFF	1.0	220								
0830		600 590								1.0	225						
0845		600 590 570								1.1	226						
0900		600 595 545								1.0	226						
0915		595 540								1.1							39.5'
0930		545 540								1.1							
0945		590 540								1.1							
1000		585 535								1.1	25						
1015		585 535								1.1							
1030		1000 580 535								1.1						28.5'	
1045		580 535								1.1							39'
1100		575 530								1.2	230						
1115		575 530								1.2							38'
1130		575 530								1.2							
1145		570 520								1.2							
1200		570 525								1.2	.5'						37'
1215		565 520								1.2							
1230		565 520								1.2							
1245		560 520								1.2							36'

## PLANT STATUS TABLE

TIME	PZR LEVEL	RCS PRESS	LP-1 WR TH/TC	LP-2 WR TH/TC	LP-3 WR TH/TC	RCP-1	RCP-2	RCP-3	CINT PRESS	CINT TEMP	SUMP LEVEL	SPRAY STATUS	H2 RECOMB A/B	H2 MONITOR A/B	SI MODE	EWST LEVEL	HI HEAD FLOW
1300	100%	100%	560 520			OFF	OFF	OFF	1.2	233		OFF	ON /ON	ON /ON	CLL		285
1315		100%	555 515						1.2								
1330			550 515						1.2							35	
1345			550 515						1.2		.75						
1400			545 510						1.2								
1415			525 545 510						1.1	230						34	
1430			540 510						1.1								
1445			500 510						1.1								
1500			535 505						1.1							33	
1515			535 505						1.0								
1530			530 505						1.0	225							
1545			530 500						1.0		1.0					32	
1600			525 500						1.0								
1615			520 495						1.0								
1630			520 490						1.0							31	
1645			515 490						1.0								
1700			510 485						1.0		1.1						

## MONITOR READINGS

Point	Cold Vit B12 eppm	Cold Vit B12 eppm	Vit B12 eppm	R-14 eppm	R-12 eppm	R-11 eppm	R-10 (24 hr blank) eppm	TIME (24 hr blank)	R-24A60 cpm	R-27A60 R/hr	R-29B μClics NG μClics S2	R-29B S2
0800	4.12 x 10 <sup>-3</sup>	5.39 x 10 <sup>-4</sup>	5.69 x 10 <sup>-3</sup>	2.23 x 10 <sup>-4</sup>	7.79 x 10 <sup>-1</sup>	0.255 x 10 <sup>1</sup>	4.42 x 10 <sup>4</sup>	2 x 10 <sup>3</sup>	1.7 x 10 <sup>3</sup>	6.1E-11		
0815	5.6 x 10 <sup>-5</sup>								1.3 x 10 <sup>2</sup>	154E-2	2.24E-6	
0830	OFF SCALE HIGH								1.6 x 10 <sup>2</sup>	2.16E-2	3.22E-6	
0845									1.7 x 10 <sup>2</sup>	2.65E-2	4.05E-6	
0900									1.7 x 10 <sup>2</sup>	3.03E-2	4.73E-6	
0915									1.9 x 10 <sup>2</sup>	3.32E-2	5.29E-6	
0930									1.8 x 10 <sup>2</sup>	3.49E-2	5.66E-6	
0945									1.8 x 10 <sup>2</sup>	3.67E-2	6.05E-6	
1000									1.7 x 10 <sup>2</sup>	3.78E-2	6.33E-6	
1015									1.7 x 10 <sup>2</sup>	3.83E-2	6.50E-6	
1030									1.6 x 10 <sup>2</sup>	3.88E-2	6.67E-6	
1045									3.9 x 10 <sup>3</sup>	3.58E0	1.64E-3	
1100									6.9 x 10 <sup>3</sup>	6.63E0	1.93E-5	
1115									7.7 x 10 <sup>3</sup>	8.06E0	2.36E-5	
1130									7.9 x 10 <sup>3</sup>	8.69E0	2.55E-5	
1145									7.9 x 10 <sup>3</sup>	8.86E0	2.61E-5	
1200									7.5 x 10 <sup>3</sup>	8.82E0	2.61E-5	
1215									7.2 x 10 <sup>3</sup>	8.69E0	2.58E-5	
1230									6.6 x 10 <sup>3</sup>	8.46E0	2.51E-5	
1245									6.0 x 10 <sup>3</sup>	8.23E0	2.45E-5	
1300									5.7 x 10 <sup>3</sup>	8.00E0	2.39E-5	
1315									5.1 x 10 <sup>3</sup>	7.73E0	2.31E-5	
1330									4.8 x 10 <sup>3</sup>	7.52E0	2.25E-5	
1345									4.5 x 10 <sup>3</sup>	7.30E0	2.18E-5	
1400									4.2 x 10 <sup>3</sup>	7.09E0	2.12E-5	
1415									3.9 x 10 <sup>3</sup>	6.83E0	2.04E-5	
1430									3.6 x 10 <sup>3</sup>	6.62E0	1.98E-5	
1445									3.4 x 10 <sup>3</sup>	6.46E0	1.94E-5	
1500									3.2 x 10 <sup>3</sup>	6.25E0	1.97E-5	

If numbers are  
unisolated the  
other components  
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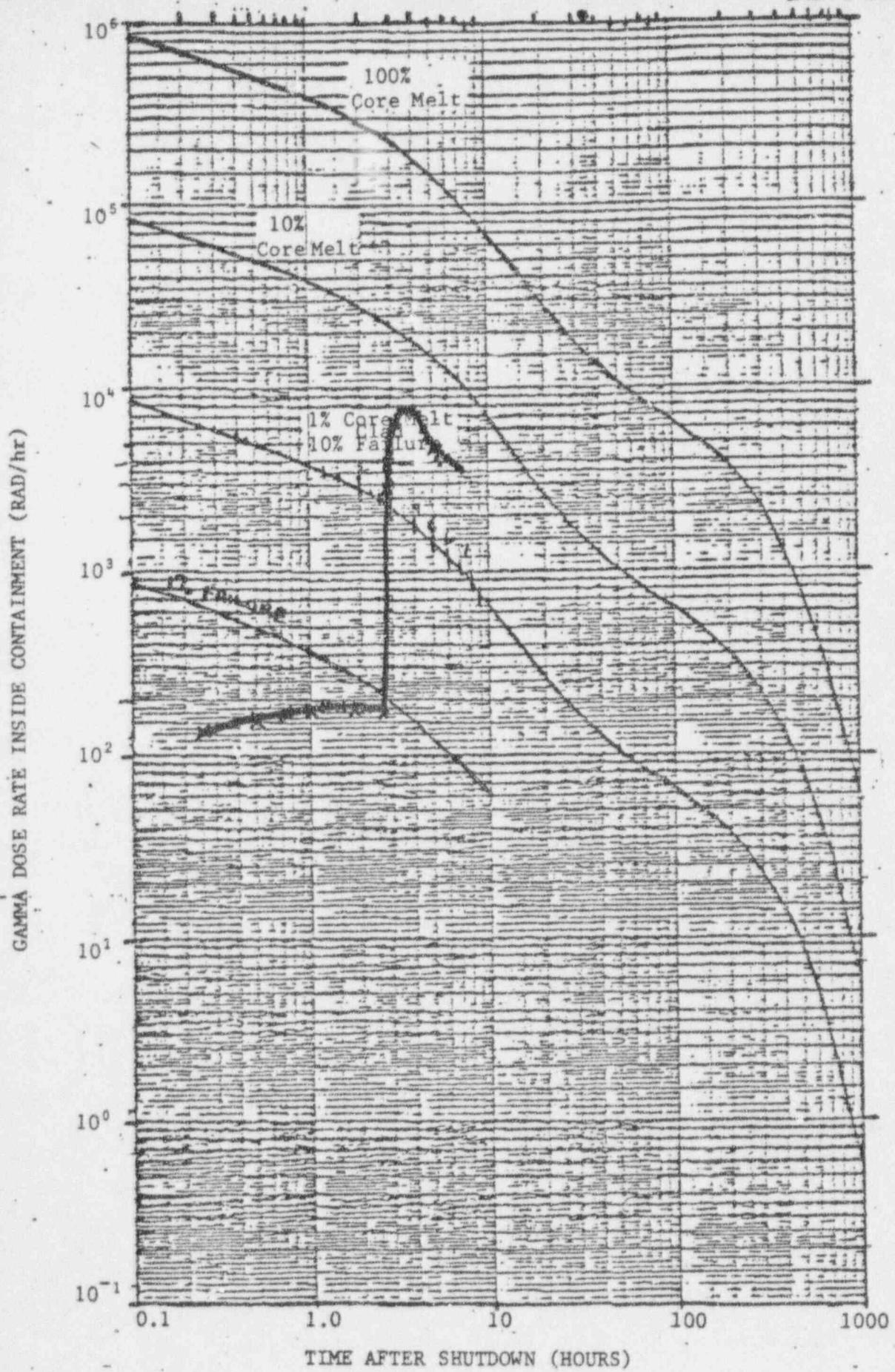


Figure 9 Gamma Dose Rate in Containment versus Time After Shutdown

Figure 9  
Rev. 0

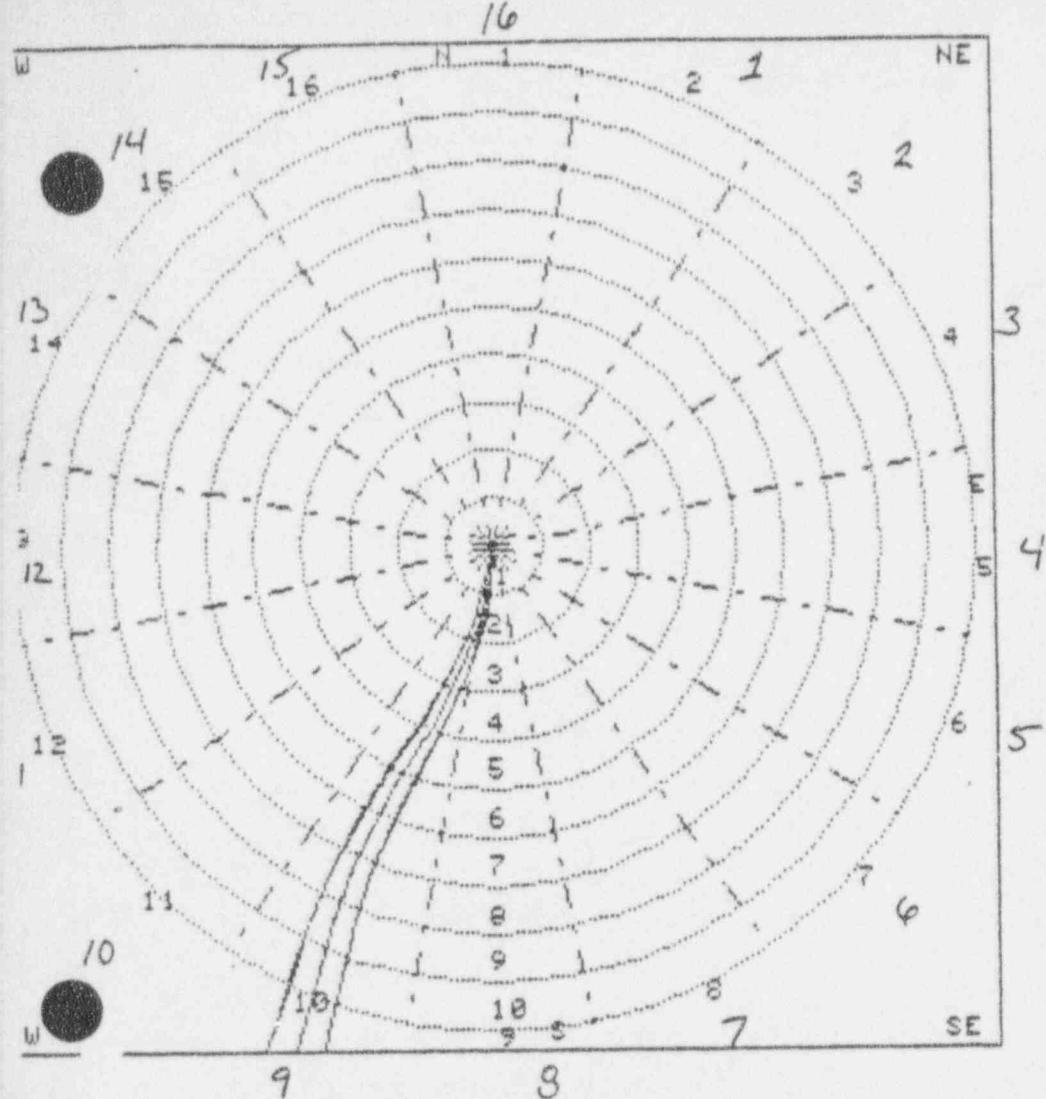
## ATTACHMENT 2

EXERCISE METEOROLOGY AND PLUME TRAJECTORIES  
(15 Minute Averages)

TIME	WS (M/S)	WD (DEGREES)	ΔT(°F PER 51 METERS)
815	3.10	13.00	-0.50
830	3.08	13.75	-0.50
845	3.05	14.50	-0.50
900	3.03	15.25	-0.50
915	3.00	16.00	-0.50
930	3.03	16.75	-0.50
945	3.05	17.50	-0.50
1000	3.08	18.25	-0.50
1015	3.10	19.00	-0.50
1030	2.93	22.25	-0.50
1045	2.75	25.50	-0.50
1100	2.58	28.75	-0.50
1115	2.40	32.00	-0.50
1130	2.45	27.75	-0.50
1145	2.50	23.50	-0.50
1200	2.55	19.25	-0.50
1215	2.60	15.00	-0.50
1230	2.23	15.50	-0.50
1245	1.85	16.00	-0.50
1300	1.48	16.50	-0.50
1315	1.10	17.00	-0.50
1330	1.73	21.25	-0.50
1345	1.80	25.50	-0.50
1400	2.05	29.75	-0.50
1415	2.10	34.00	-0.50
1430	2.30	28.00	-0.50
1445	2.05	22.00	-0.50
1500	1.10	16.00	-0.50
1515	1.73	10.00	-0.50
1530	2.58	11.50	-0.50
1545	2.93	13.00	-0.50
1600	2.60	14.50	-0.50
1615	3.10	16.00	-1.00
1630	3.03	16.00	-1.00
1645	3.00	16.00	-1.00
1700	2.93	16.00	-1.00

SITE BOUNDARY DOSE RATE SUMMARY

TIME	WHOLE BODY	THYROID	TIME	WHOLE BODY	THYROID
0815	0.66	0.68	1200	498	18
0830	1.91	2.22	1215	477	18
0845	2.54	2.93	1230	391	16
0900	2.86	3.51	1245	279	12
0915	3.06	3.96	1300	154	7
0930	3.15	4.31	1315	171	8
0945	3.20	4.62	1330	198	9
1000	3.19	4.85	1345	200	10
1015	3.16	5.06	1400	230	12
1030	3.01	5.07	1415	222	12
1045	102	302	1430	230	12
1100	359	11	1445	187	10
1115	453	15	1500	105	6
1130	498	17	1515	122	7
1145	507	18			



Note: Sector labeling by computer in error.  
 Accurate labeling of sectors shown in pen.

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 08:19

STABILITY CLASS D

DATE: 83/01/14

LEW 6.9 MPH FROM 013 DEG

CURRENT PLUME INFORMATION AS OF 08:15 ON 83/01/14  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z
ULIAN DAY =	14								
1G	1.7	193	9	8:15	4.85E-15	2.22E-13	2.22E-13	TH	177
1G	SB	193	9	8:15	1.50E-14	6.91E-13	6.91E-13	TH	91.5
									63.2
									9.17E-06
									2.84E-05

↓ Ground

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 08:19

STABILITY CLASS D

DATE: 83/01/14  
LEV: 6.9 MPH FROM 013 DEG  
CURRENT PLUME INFORMATION AS OF 08:15 ON 83/01/14  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
ULIAN DAY =	14										
1E	1.7	193	9	8:15	5.31E-01	5.46E-01	5.46E-01	TH	176.	62.3	4.88E-06
1E	SB	193	9	8:15	6.57E-01	6.76E-01	6.76E-01	TH	90.8	0.0	6.04E-06

↓  
Elevated

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 08:20

DATE: 83/01/14

STABILITY CLASS D

LEV: 6.9 MPH FROM 013 DEG

CURRENT PLUME INFORMATION AS OF 08:15 ON 83/01/14

ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
ULIAN DAY =	14										
1G	1.7	193	9	8:15	4.85E-15	2.22E-13	2.22E-13	TH	177.	63.2	9.17E-06
1G	5B	193	9	8:15	1.50E-14	6.91E-13	6.91E-13	TH	91.5	0.0	2.84E-05
1G	2.0	193	9	8:17	3.94E-15	1.81E-13	1.81E-13	TH	200.	0.0	7.45E-06
1G	3.0	193	9	8:26	2.19E-15	1.00E-13	1.00E-13	TH	283.	0.0	4.14E-06
1G	4.0	193	9	8:35	1.44E-15	6.61E-14	6.61E-14	TH	363.	0.0	2.72E-06
1G	5.0	193	9	8:43	1.04E-15	4.78E-14	4.78E-14	TH	442.	0.0	1.96E-06
1G	6.0	193	9	8:52	7.98E-16	3.66E-14	3.66E-14	TH	519.	0.0	1.51E-06
1G	7.0	193	9	9:1	6.38E-16	2.92E-14	2.92E-14	TH	595.	0.0	1.20E-06
1G	8.0	193	9	9:9	5.25E-16	2.41E-14	2.41E-14	TH	670.	0.0	9.92E-07
1G	9.0	193	9	9:18	4.42E-16	2.03E-14	2.03E-14	TH	744.	0.0	8.35E-07
1G	10.0	193	9	9:27	3.79E-16	1.74E-14	1.74E-14	TH	817.	0.0	7.16E-07
1G	20.0	193	9	10:53	1.38E-16	6.33E-15	6.33E-15	TH	1531	0.0	2.60E-07
1G	30.0	193	9	12:20	7.64E-17	3.50E-15	3.50E-15	TH	2223	0.0	1.44E-07
1G	40.0	193	9	13:46	5.02E-17	2.30E-15	2.30E-15	TH	2902	0.0	9.50E-08
1G	50.0	193	9	15:13	3.63E-17	1.66E-15	1.66E-15	TH	3575	0.0	6.66E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 08:20  
STABILITY CLASS D

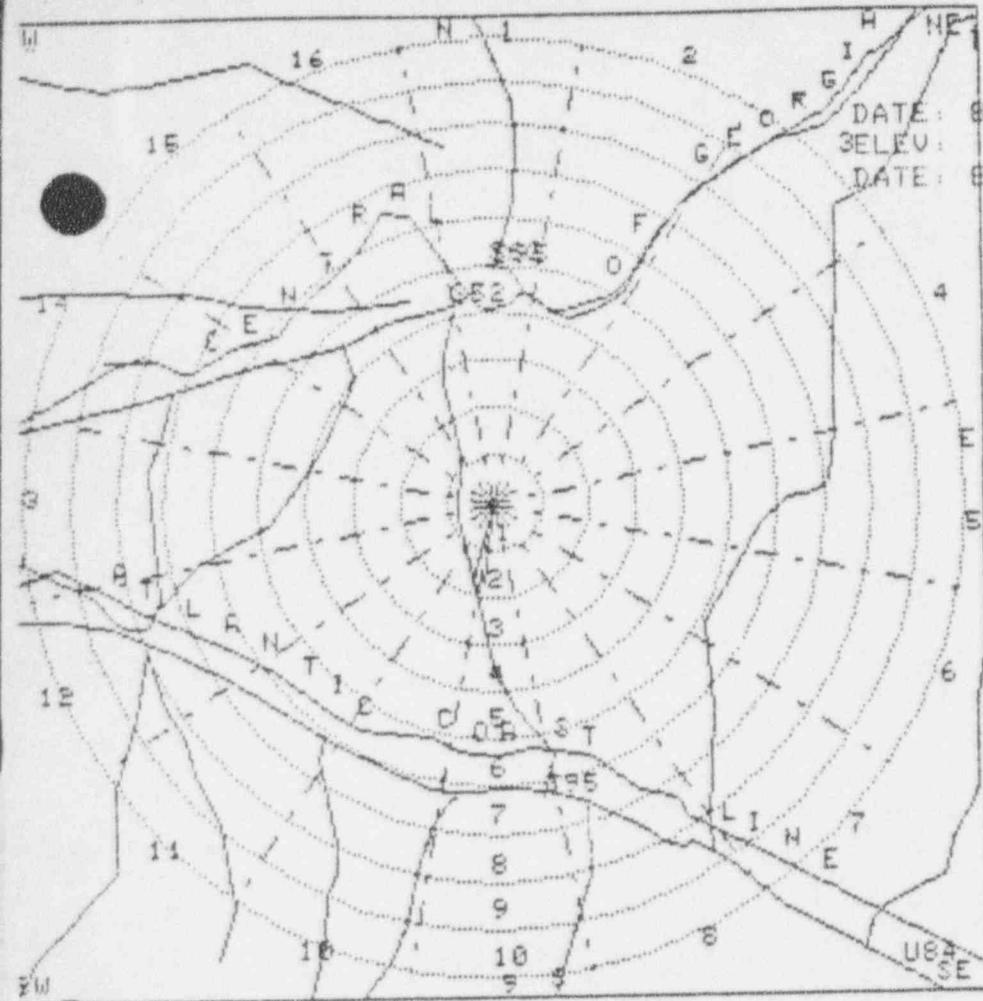
TE: 83/01/14

EV: 6.9 MPH FROM 013 DEG

CURRENT PLUME INFORMATION AS OF 08:15 ON 83/01/14  
ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

D	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z	
	ILIAN DAY =	14								
1E	1.7	193	9	8:15	5.31E-01	5.46E-01	TH	176.	62.3	4.88E-06
1E	5.8	193	9	8:15	6.57E-01	6.76E-01	TH	90.8	0.0	6.04E-06
1E	2.0	193	9	8:17	4.77E-01	4.91E-01	TH	199.	0.0	4.39E-06
1E	3.0	193	9	8:26	3.25E-01	3.35E-01	TH	283.	0.0	2.99E-06
1E	4.0	193	9	8:35	2.35E-01	2.42E-01	TH	363.	0.0	2.16E-06
1E	5.0	193	9	8:43	1.79E-01	1.84E-01	TH	442.	0.0	1.64E-06
1E	6.0	193	9	8:52	1.42E-01	1.46E-01	TH	519.	0.0	1.30E-06
1E	7.0	193	9	9:1	1.16E-01	1.19E-01	TH	595.	0.0	1.06E-06
1E	8.0	193	9	9:9	9.73E-02	1.00E-01	TH	670.	0.0	8.95E-07
1E	9.0	193	9	9:18	8.30E-02	8.55E-02	TH	744.	0.0	7.63E-07
1E	10.0	193	9	9:27	7.19E-02	7.40E-02	TH	817.	0.0	6.61E-07
1E	20.0	193	9	10:53	2.73E-02	2.81E-02	TH	1531	0.0	2.51E-07
1E	30.0	193	9	12:20	1.53E-02	1.57E-02	TH	2223	0.0	1.41E-07
1E	40.0	193	9	13:46	1.01E-02	1.04E-02	TH	2902	0.0	9.33E-08
1E	50.0	193	9	15:13	7.36E-03	7.57E-03	TH	3575	0.0	6.76E-08



AEROMONITOR  
FARLEY NUCLEAR PLANT  
DATE: 03/01/14 -DAY- TIME: 8:221  
ELEV: 6.9 MPH FROM 013 DEG, CLASS D  
DATE: 03/01/14 -PLUME- TIME: 08:15

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 08:37  
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.9 MPH FROM 013 DEG

CURRENT PLUME INFORMATION AS OF 08:30 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/D  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JLIAN DAY =	14										
2G	1.7	194	9	8:45	4.52E-15	2.32E-13	2.32E-13	TH	176.	62.9	9.31E-06
2G	SB	194	9	8:45	1.39E-14	7.13E-13	7.13E-13	TH	91.5	0.0	2.86E-05
1G	3.5	193	9	8:45	1.58E-15	8.14E-14	8.14E-14	TH	319.	94.9	3.38E-06

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 08:37  
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.9 MPH FROM 013 DEG

CURRENT PLUME INFORMATION AS OF 08:30 ON 83/01/14  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
ULIAN DAY =	14										
2E	1.7	194	9	8:45	1.56E+00	1.81E+00	1.81E+00	TH	175.	62.0	4.91E-06
2E	SB	194	9	8:45	1.91E+00	2.22E+00	2.22E+00	TH	90.8	0.0	6.02E-06
1E	3.5	193	9	8:45	2.93E-01	3.43E-01	3.43E-01	TH	320.	94.5	3.09E-06

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 08:37  
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.9 MPH FROM 013 DEG

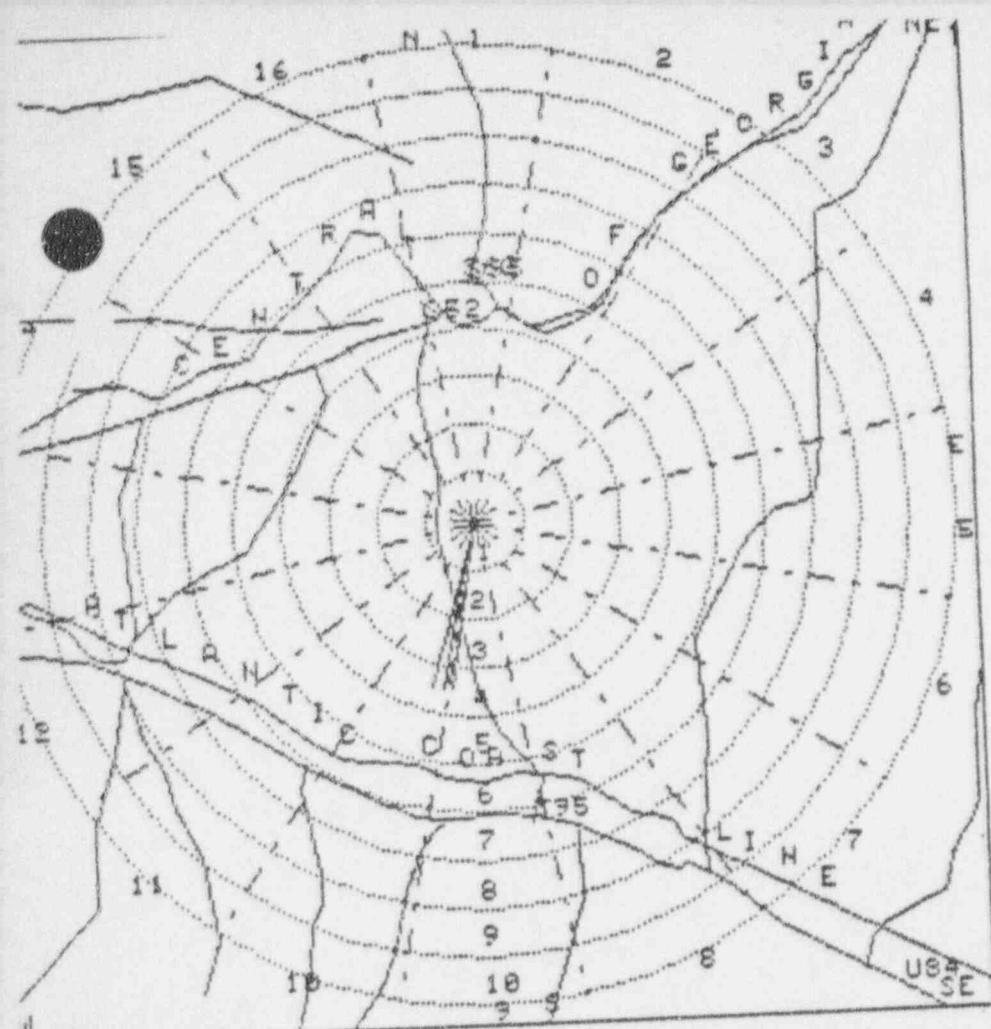
CURRENT PLUME INFORMATION AS OF 08:30 ON 83/01/14  
ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JLIAN DAY =	14										
2G	1.7	194	9	8:45	4.52E-15	2.32E-13	2.32E-13	TH	176.	62.9	9.31E-06
2G	5.8	194	9	8:45	1.39E-14	7.13E-13	7.13E-13	TH	91.5	0.0	2.96E-05
1G	3.5	193	9	8:45	1.58E-15	8.14E-14	8.14E-14	TH	319.	94.9	3.33E-06
1G	4.0	193	9	8:50	1.28E-15	6.58E-14	6.58E-14	TH	362.	0.0	2.73E-06
1G	5.0	193	9	8:58	9.25E-16	4.75E-14	4.75E-14	TH	441.	0.0	1.97E-06
1G	6.0	194	9	9:07	7.09E-16	3.64E-14	3.64E-14	TH	518.	0.0	1.51E-06
1G	7.0	194	9	9:16	5.66E-16	2.90E-14	2.90E-14	TH	594.	0.0	1.20E-06
1G	8.0	194	9	9:25	4.65E-16	2.39E-14	2.39E-14	TH	669.	0.0	9.94E-07
1G	9.0	194	9	9:33	3.92E-16	2.01E-14	2.01E-14	TH	743.	0.0	8.37E-07
1G	10.0	194	9	9:42	3.36E-16	1.72E-14	1.72E-14	TH	817.	0.0	7.17E-07
1G	20.0	194	9	11:09	1.22E-16	6.22E-15	6.22E-15	TH	1530	0.0	2.61E-07
1G	30.0	194	9	12:36	6.77E-17	3.47E-15	3.47E-15	TH	2222	0.0	1.44E-07
1G	40.0	194	9	14:03	4.45E-17	2.28E-15	2.28E-15	TH	2902	0.0	9.50E-08
1G	50.0	194	9	15:30	3.21E-17	1.65E-15	1.65E-15	TH	3574	0.0	6.86E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 08:38  
STABILITY CLASS DDATE: 83/01/14  
LEV: 6.9 MPH FROM 013 DEGCURRENT PLUME INFORMATION AS OF 08:30 ON 83/01/14  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/0  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	TH	175	62.0	4.91E-06
TULIAN DAY = 14											
2E	1.7	194	9	8:45	1.56E+00	1.81E+00	1.81E+00	TH	90.8	0.0	6.02E-06
2E	58	194	9	8:45	1.91E+00	2.22E+00	2.22E+00	TH	320.	94.5	3.09E-06
1E	3.5	193	9	8:45	2.93E-01	3.43E-01	3.43E-01	TH	363.	0.0	2.53E-06
1E	4.0	193	9	8:50	2.40E-01	2.81E-01	2.81E-01	TH	442.	0.0	1.86E-06
1E	5.0	193	9	8:58	1.76E-01	2.06E-01	2.06E-01	TH	519.	0.0	1.44E-06
1E	6.0	194	9	9: 7	1.36E-01	1.60E-01	1.60E-01	TH	595.	0.0	1.16E-06
1E	7.0	194	9	9:16	1.09E-01	1.28E-01	1.28E-01	TH	670.	0.0	9.61E-07
1E	8.0	194	9	9:25	9.09E-02	1.06E-01	1.06E-01	TH	744.	0.0	8.12E-07
1E	9.0	194	9	9:33	7.69E-02	9.01E-02	9.01E-02	TH	817.	0.0	6.99E-07
1E	10.0	194	9	9:42	6.61E-02	7.75E-02	7.75E-02	TH	1531	0.0	2.57E-07
1E	20.0	194	9	11: 9	2.44E-02	2.85E-02	2.85E-02	TH	2223	0.0	1.43E-07
1E	30.0	194	9	12:36	1.35E-02	1.59E-02	1.59E-02	TH	2902	0.0	9.44E-08
1E	40.0	194	9	14: 3	8.93E-03	1.04E-02	1.04E-02	TH	3575	0.0	6.83E-08
1E	50.0	194	9	15:30	6.46E-03	7.57E-03	7.57E-03	TH			



ACTUAL INCIDENT  
 FARLEY NUCLEAR PLANT  
 DATE: 83/01/14 -DAY- TIME: 8:409  
 ELEV: 6.9 MPH FROM 013 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 08:30

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 08:47  
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.8 MPH FROM 014 DEG

CURRENT PLUME INFORMATION AS OF 08:45 ON 83/01/14  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE 1D	Y	Z		
ULIAN DAY =	14										
3G	1.7	195	9	8:45	4.78E-15	2.45E-13	2.45E-13	TH	174.	62.6	9.54E-06
3G	SB	195	9	8:45	1.45E-14	7.45E-13	7.45E-13	TH	91.5	0.0	2.89E-05
2G	3.4	194	9	8:45	1.67E-15	8.61E-14	8.61E-14	TH	316.	94.4	3.45E-06
1G	5.2	194	9	8:45	8.87E-16	4.55E-14	4.55E-14	TH	452.	119.	1.89E-06

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 08:47  
STABILITY CLASS D

DATE: 03/01/14

EV: 6.8 MPH FROM 014 DEG

CURRENT PLUME INFORMATION AS OF 08:45 ON 03/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	WILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JLIAN DAY =	14										
3E	1.7	195	9	8:45	2.10E+00	2.43E+00	2.43E+00	TH	174.	61.6	4.97E-06
3E	SB	195	9	8:45	2.54E+00	2.93E+00	2.93E+00	TH	90.8	0.0	6.00E-06
2E	3.4	194	9	8:45	1.00E+00	1.16E+00	1.16E+00	TH	318.	94.0	3.15E-06
1E	5.2	194	9	8:45	1.66E-01	1.95E-01	1.95E-01	TH	454.	119.	1.76E-06

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 08:47

STABILITY CLASS D

ATE: 83/01/14

LEV: 6.8 MPH FROM 014 DEG

CURRENT PLUME INFORMATION AS OF 08:45 ON 83/01/14

ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/0  
ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY = 14											
3G	1.7	195	9	8:45	4.78E-15	2.45E-13	2.45E-13	TH	174.	62.6	9.54E-06
3G	SB	195	9	8:45	1.45E-14	7.45E-13	7.45E-13	TH	91.5	0.0	2.89E-05
2G	3.4	194	9	8:45	1.67E-15	8.61E-14	8.61E-14	TH	316.	94.4	3.45E-06
1G	5.2	194	9	8:45	2.87E-16	4.55E-14	4.55E-14	TH	452.	119.	1.89E-06
1G	6.0	194	9	8:52	7.12E-16	3.65E-14	3.65E-14	TH	517.	0.0	1.52E-06
1G	7.0	194	9	9: 1	5.68E-16	2.91E-14	2.91E-14	TH	593.	0.0	1.21E-06
1G	8.0	194	9	9:10	4.67E-16	2.39E-14	2.39E-14	TH	668.	0.0	9.97E-07
1G	9.0	194	9	9:19	3.93E-16	2.01E-14	2.01E-14	TH	742.	0.0	8.39E-07
1G	10.0	194	9	9:28	3.37E-16	1.73E-14	1.73E-14	TH	815.	0.0	7.19E-07
1G	20.0	194	9	10:55	1.22E-16	6.28E-15	6.28E-15	TH	1529	0.0	2.61E-07
1G	30.0	194	9	12:23	6.77E-17	3.47E-15	3.47E-15	TH	2221	0.0	1.44E-07
1G	40.0	194	9	13:51	4.45E-17	2.28E-15	2.28E-15	TH	2901	0.0	9.50E-08
1G	50.0	194	9	15:19	3.21E-17	1.65E-15	1.65E-15	TH	3573	0.0	6.87E-08

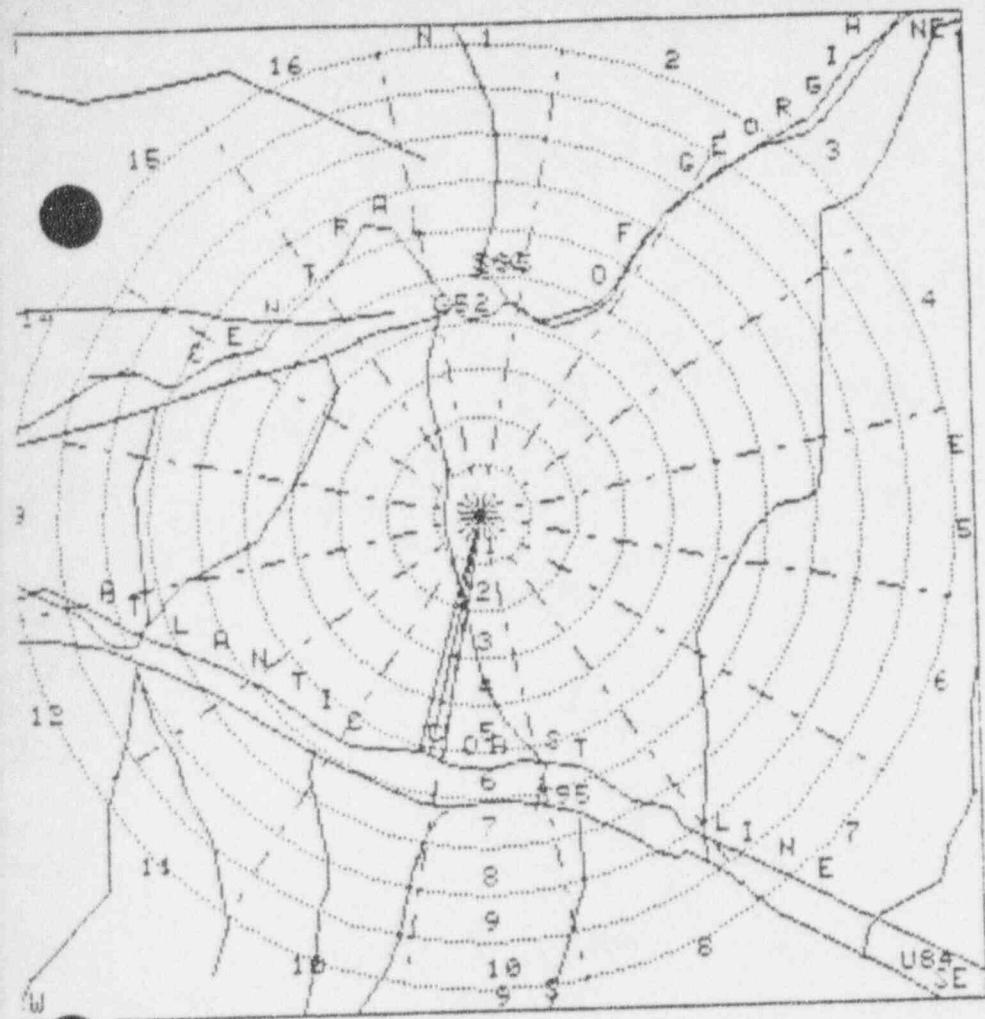
ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 08:47  
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.8 MPH FROM 014 DEG

CURRENT PLUME INFORMATION AS OF 08:45 ON 83/01/14  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
ULIAN DAY =	14										
3E	1.7	195	9	8:45	2.10E+00	2.43E+00	2.43E+00	TH	174.	61.6	4.97E-06
3E	SB	195	9	8:45	2.54E+00	2.93E+00	2.93E+00	TH	90.8	0.0	6.00E-06
2E	3.4	194	9	8:45	1.00E+00	1.16E+00	1.16E+00	TH	318.	94.0	3.15E-06
1E	5.2	194	9	8:45	1.66E-01	1.95E-01	1.95E-01	TH	454.	119.	1.76E-06
1E	6.0	194	9	8:52	1.35E-01	1.58E-01	1.58E-01	TH	519.	0.0	1.43E-06
1E	7.0	194	9	9: 1	1.09E-01	1.27E-01	1.27E-01	TH	595.	0.0	1.15E-06
1E	8.0	194	9	9:10	9.03E-02	1.05E-01	1.05E-01	TH	670.	0.0	9.55E-07
1E	9.0	194	9	9:19	7.64E-02	8.96E-02	8.96E-02	TH	744.	0.0	8.08E-07
1E	10.0	194	9	9:28	6.58E-02	7.71E-02	7.71E-02	TH	817.	0.0	6.95E-07
1E	20.0	194	9	10:55	2.43E-02	2.85E-02	2.85E-02	TH	1531	0.0	2.57E-07
1E	30.0	194	9	12:23	1.35E-02	1.58E-02	1.58E-02	TH	2223	0.0	1.43E-07
1E	40.0	194	9	13:51	8.92E-03	1.04E-02	1.04E-02	TH	2902	0.0	9.43E-08
1E	50.0	194	9	15:19	6.46E-03	7.57E-03	7.57E-03	TH	3575	0.0	6.82E-08



ACTUAL INCIDENT

FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 8:498

ELEV: 6.8 MPH FROM 014 DEG, CLASS D

DATE: 83/01/14 -PLUME- TIME: 08:45

ROADS AND RAILROADS TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 09:02  
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.8 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 09:00 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
01	ULIAN DAY = 14										
46	1.7	195	9	9: 0	4.73E-15	2.56E-13	2.56E-13	TH	173.	62.3	9.69E-06
46	SB	195	9	9: 0	1.42E-14	7.70E-13	7.70E-13	TH	91.5	0.0	2.91E-05
52	3.4	195	9	9: 0	1.66E-15	9.03E-14	9.03E-14	TH	315.	94.0	3.52E-06
26	5.1	194	9	9: 0	8.82E-16	4.78E-14	4.78E-14	TH	449.	119.	1.92E-06
16	6.9	194	9	9: 0	5.53E-16	2.99E-14	2.99E-14	TH	581.	141.	1.25E-06

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 09:02  
STABILITY CLASS D

TE: 83/01/14

EV: 6.8 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 09:00 ON 83/01/14  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CH1/Q

ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JLIAN DAY =	14											
4E	1.7	195	9	9: 0	2.39E+00	2.93E+00	2.93E+00	TH	173.	61.4	5.00E-06	
4E	SB	195	9	9: 0	2.86E+00	3.51E+00	3.51E+00	TH	90.8	0.0	5.99E-06	
3E	3.4	195	9	9: 0	1.26E+00	1.56E+00	1.56E+00	TH	315.	93.6	3.21E-06	
2E	5.1	194	9	9: 0	5.31E-01	6.59E-01	6.59E-01	TH	451.	119.	1.79E-06	
1E	6.9	194	9	9: 0	1.03E-01	1.29E-01	1.29E-01	TH	584.	141.	1.17E-06	

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 09:02  
STABILITY CLASS D

TE: 83/01/14

EV: 6.8 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 09:00 ON 83/01/14  
ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
D MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

ILIAN DAY	=	14									
4G	1.7	195	9	9: 0	4.73E-15	2.56E-13	2.56E-13	TH	173.	62.3	9.69E-06
4G	58	195	9	9: 0	1.42E-14	7.70E-13	7.70E-13	TH	91.5	0.0	2.91E-05
3G	3.4	195	9	9: 0	1.66E-15	9.03E-14	9.03E-14	TH	315.	94.0	3.52E-06
2G	5.1	194	9	9: 0	8.82E-16	4.78E-14	4.78E-14	TH	449.	119.	1.92E-06
1G	6.9	194	9	9: 0	5.53E-16	2.99E-14	2.99E-14	TH	581.	141.	1.25E-06
1G	7.0	194	9	9: 1	5.37E-16	2.90E-14	2.90E-14	TH	592.	0.0	1.21E-06
1G	8.0	194	9	9:10	4.41E-16	2.39E-14	2.39E-14	TH	667.	0.0	7.99E-07
1G	9.0	194	9	9:19	3.71E-16	2.01E-14	2.01E-14	TH	741.	0.0	8.41E-07
1G	10.0	194	9	9:28	3.18E-16	1.72E-14	1.72E-14	TH	815.	0.0	7.20E-07
1G	20.0	195	9	10:56	1.15E-16	6.26E-15	6.26E-15	TH	1529	0.0	2.61E-07
1G	30.0	195	9	12:25	6.39E-17	3.46E-15	3.46E-15	TH	2220	0.0	1.44E-07
1G	40.0	195	9	13:53	4.20E-17	2.27E-15	2.27E-15	TH	2900	0.0	9.51E-08
1G	50.0	195	9	15:22	3.03E-17	1.64E-15	1.64E-15	TH	3573	0.0	6.87E-08

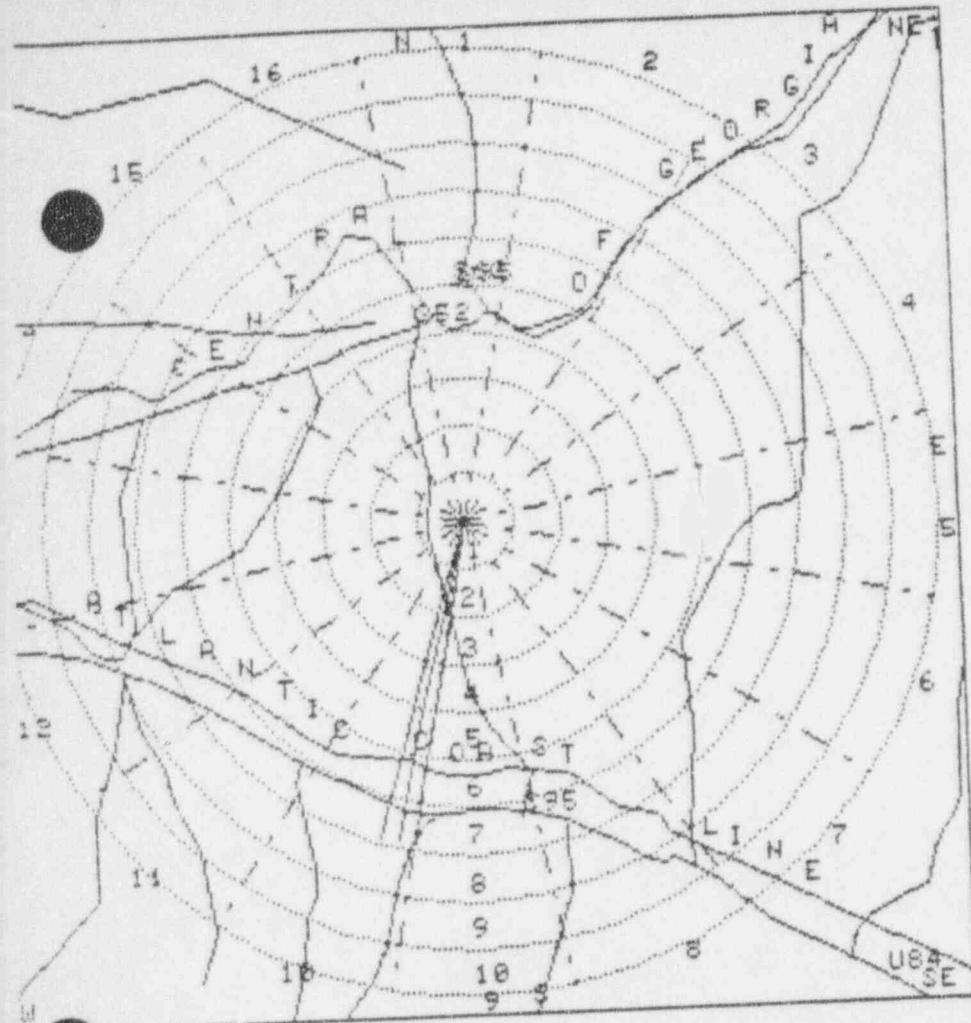
ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 09:02  
STABILITY CLASS D

TE: 83/01/14

EV: 6.8 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 09:00 ON 83/01/14  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY =	14										
4E	1.7	195	9	9: 0	2.39E+00	2.93E+00	2.93E+00	TH	173.	61.4	5.00E-06
4E	SB	195	9	9: 0	2.86E+00	3.51E+00	3.51E+00	TH	90.8	0.0	5.99E-06
3E	3.4	195	9	9: 0	1.26E+00	1.56E+00	1.56E+00	TH	315.	93.6	3.21E-06
2E	5.1	194	9	9: 0	5.31E-01	6.59E-01	6.59E-01	TH	451.	119.	1.79E-06
1E	6.9	194	9	9: 0	1.03E-01	1.29E-01	1.29E-01	TH	584.	141.	1.17E-06
1E	7.0	194	9	9: 1	1.00E-01	1.26E-01	1.26E-01	TH	595.	0.0	1.14E-06
1E	8.0	194	9	9:10	8.37E-02	1.04E-01	1.04E-01	TH	670.	0.0	9.47E-07
1E	9.0	194	9	9:19	7.09E-02	8.85E-02	8.85E-02	TH	744.	0.0	8.02E-07
1E	10.0	194	9	9:28	6.10E-02	7.62E-02	7.62E-02	TH	817.	0.0	6.91E-07
1E	20.0	195	9	10:56	2.26E-02	2.83E-02	2.83E-02	TH	1531	0.0	2.56E-07
1E	30.0	195	9	12:25	1.26E-02	1.57E-02	1.57E-02	TH	2223	0.0	1.42E-07
1E	40.0	195	9	13:53	8.32E-03	1.04E-02	1.04E-02	TH	2902	0.0	9.42E-08
1E	50.0	195	9	15:22	6.02E-03	7.52E-03	7.52E-03	TH	3575	0.0	6.82E-08



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 9:043  
ELEV: 6.8 MPH FROM 015 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 09:00

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE: 7

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 09:18  
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.7 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 09:15 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JL1AN	DAY =	14									
SG	1.7	196	9	9:15	4.71E-15	2.69E-13	2.69E-13	TH	172.	62.0	9.93E-06
SG	SB	196	9	9:15	1.39E-14	7.97E-13	7.97E-13	TH	91.5	0.0	2.94E-05
4G	3.4	196	9	9:15	1.66E-15	9.47E-14	9.47E-14	TH	312.	93.4	3.60E-06
3G	5.1	195	9	9:15	8.81E-16	5.03E-14	5.03E-14	TH	446.	118.	1.97E-06
2G	6.8	195	9	9:15	5.52E-16	3.15E-14	3.15E-14	TH	576.	140.	1.27E-06
1G	8.5	194	9	9:15	3.80E-16	2.17E-14	2.17E-14	TH	705.	159.	9.11E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 09:18  
STABILITY CLASS D

DATE: 03/01/14

EV: 6.7 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 09:15 ON 03/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY =	14										
5E	1.7	196	9	9:15	2.59E+00	3.36E+00	3.36E+00	TH	172.	61.0	5.06E-06
5E	5B	196	9	9:15	3.06E+00	3.96E+00	3.96E+00	TH	90.8	0.0	5.97E-06
4E	3.4	196	9	9:15	1.46E+00	1.90E+00	1.90E+00	TH	313.	93.1	3.26E-06
3E	5.1	195	9	9:15	6.76E-01	8.87E-01	8.87E-01	TH	448.	118.	1.83E-06
2E	6.8	195	9	9:15	3.31E-01	4.38E-01	4.38E-01	TH	580.	140.	1.19E-06
1E	8.5	194	9	9:15	7.24E-02	9.63E-02	9.63E-02	TH	709.	159.	8.76E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 09:18  
STABILITY CLASS D

ATE: 83/01/14

LEV: 6.7 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 09:15 ON 83/01/14  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY = 14											
SG	1.7	196	9	9:15	4.71E-15	2.69E-13	2.69E-13	TH	172.	62.0	9.93E-06
SG	58	196	9	9:15	1.39E-14	7.97E-13	7.97E-13	TH	91.5	0.0	2.94E-05
4G	3.4	196	9	9:15	1.66E-15	9.47E-14	9.47E-14	TH	312.	93.4	3.60E-06
3G	5.1	195	9	9:15	8.81E-16	5.03E-14	5.03E-14	TH	446.	118.	1.97E-06
2G	6.8	195	9	9:15	5.52E-16	3.15E-14	3.15E-14	TH	576.	140.	1.27E-06
1G	8.5	194	9	9:15	3.80E-16	2.17E-14	2.17E-14	TH	705.	159.	9.11E-07
1G	9.0	195	9	9:19	3.51E-16	2.00E-14	2.00E-14	TH	740.	0.0	8.43E-07
1G	10.0	195	9	9:28	3.01E-16	1.72E-14	1.72E-14	TH	813.	0.0	7.22E-07
1G	20.0	195	9	10:58	1.09E-16	6.23E-15	6.23E-15	TH	1527	0.0	2.61E-07
1G	30.0	196	9	12:27	6.04E-17	3.45E-15	3.45E-15	TH	2219	0.0	1.44E-07
1G	40.0	196	9	13:56	3.97E-17	2.26E-15	2.26E-15	TH	2899	0.0	9.51E-08
1G	50.0	196	9	15:26	2.86E-17	1.63E-15	1.63E-15	TH	3572	0.0	6.87E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 09:18

STABILITY CLASS D

ATE: 83/01/14

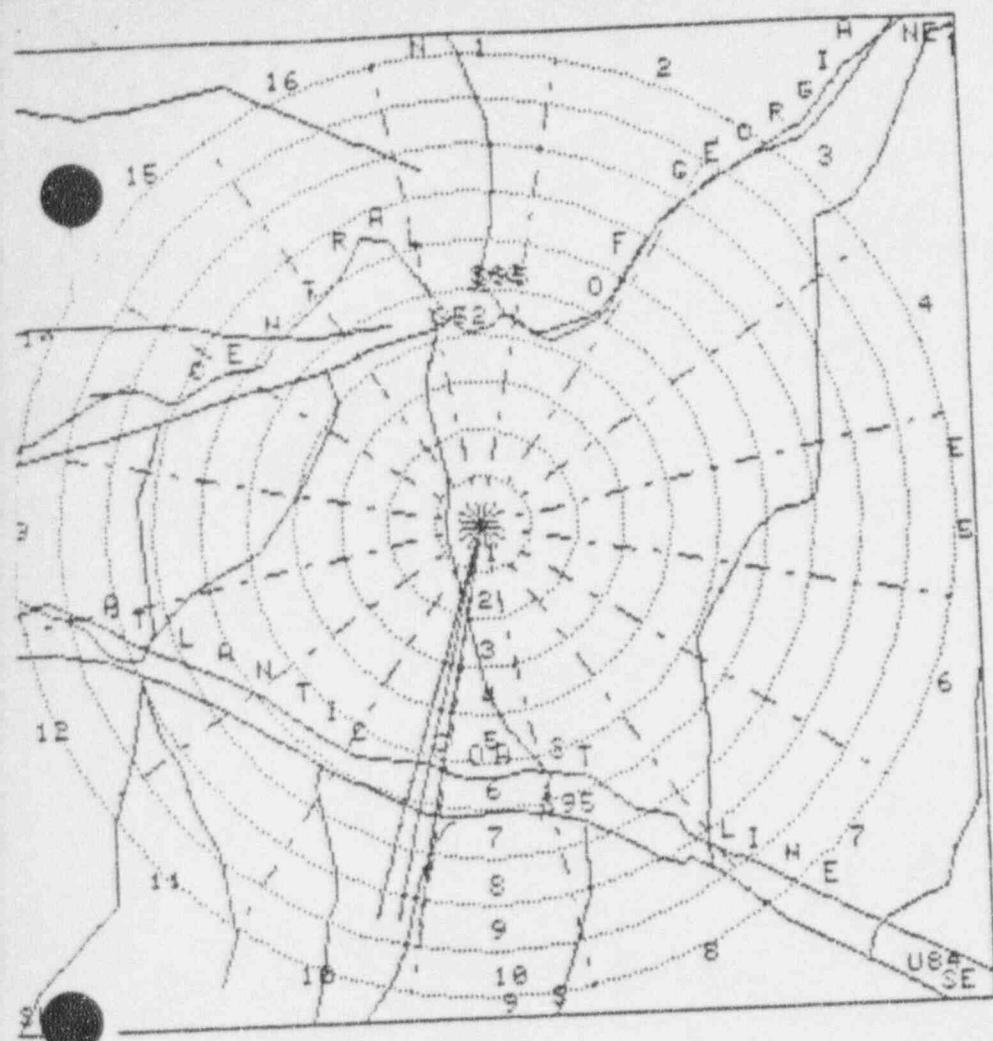
LEV: 6.7 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 09:15 ON 83/01/14

ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	TH	172	61.0	5.06E-06
ULIAN DAY = 14											
SE	1.7	196	9	9:15	2.59E+00	3.36E+00	3.36E+00	TH	90.8	0.0	5.97E-06
SE	SB	196	9	9:15	3.06E+00	3.96E+00	3.96E+00	TH	313.	93.1	3.26E-06
4E	3.4	196	9	9:15	1.46E+00	1.90E+00	1.90E+00	TH	448.	118.	1.83E-06
3E	5.1	195	9	9:15	6.76E-01	8.87E-01	8.87E-01	TH	580.	140.	1.19E-06
2E	6.8	195	9	9:15	3.31E-01	4.38E-01	4.38E-01	TH	709.	159.	8.76E-07
1E	8.5	194	9	9:15	7.24E-02	9.63E-02	9.63E-02	TH	744.	0.0	8.12E-07
1E	9.0	195	9	9:19	6.71E-02	8.92E-02	8.92E-02	TH	817.	0.0	6.99E-07
1E	10.0	195	9	9:28	5.77E-02	7.67E-02	7.67E-02	TH	1531	0.0	2.57E-07
1E	20.0	195	9	10:58	2.13E-02	2.83E-02	2.83E-02	TH	2223	0.0	1.43E-07
1E	30.0	196	9	12:27	1.18E-02	1.57E-02	1.57E-02	TH	2903	0.0	9.44E-08
1E	40.0	196	9	13:56	7.80E-03	1.03E-02	1.03E-02	TH	3575	0.0	6.83E-08
1E	50.0	196	9	15:26	5.64E-03	7.50E-03	7.50E-03	TH			



ACTUAL INCIDENT  
 FARLEY NUCLEAR PLANT  
 DATE: 83/01/14 -DAY- TIME: 9:209  
 ELEV: 6.7 MPH FROM 016 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 09:15

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

JINTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 09:32  
STABILITY CLASS D

TE: 83/01/14

EV: 6.8 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 09:30 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14SIGMA CHI/Q  
DOSE RATE ID Y Z

D	...LE	DEG SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z		
ILIAN DAY =	14									
6G	1.7	197	9	9:30	4.47E-15	2.68E-13	2.68E-13	TH 173.	62.3	9.69E-06
6G	SB	197	9	9:30	1.34E-14	8.07E-13	8.07E-13	TH 91.5	0.0	2.91E-05
5G	3.4	196	9	9:30	1.60E-15	9.67E-14	9.67E-14	TH 315.	94.0	3.58E-06
4G	5.1	196	9	9:30	8.61E-16	5.17E-14	5.17E-14	TH 447.	118.	1.97E-06
3G	6.8	196	9	9:30	5.45E-16	3.27E-14	3.27E-14	TH 577.	140.	1.28E-06
2G	8.5	195	9	9:30	3.76E-16	2.25E-14	2.25E-14	TH 704.	159.	9.19E-07
1G	10.2	195	9	9:30	2.75E-16	1.65E-14	1.65E-14	TH 831.	177.	6.97E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 09:32  
STABILITY CLASS DITE: 83/01/14  
LEV: 6.8 MPH FROM 016 DEGCURRENT PLUME INFORMATION AS OF 09:30 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/0  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY = 14											
6E	1.7	197	9	9:30	2.63E+00	3.60E+00	3.60E+00	TH	173.	61.4	5.00E-06
6E	SB	197	9	9:30	3.15E+00	4.31E+00	4.31E+00	TH	90.8	0.0	5.99E-06
5E	3.4	196	9	9:30	1.58E+00	2.18E+00	2.18E+00	TH	313.	93.1	3.29E-06
4E	5.1	196	9	9:30	7.73E-01	1.07E+00	1.07E+00	TH	447.	118.	1.84E-06
3E	6.8	196	9	9:30	4.19E-01	5.85E-01	5.85E-01	TH	577.	140.	1.21E-06
2E	8.5	195	9	9:30	2.30E-01	3.23E-01	3.23E-01	TH	706.	159.	8.88E-07
1E	10.2	195	9	9:30	5.05E-02	7.15E-02	7.15E-02	TH	834.	177.	6.53E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 09:33  
STABILITY CLASS D

TE: 83/01/14

EV: 6.8 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 09:30 ON 83/01/14  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

D MILE	DAY	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z		
ILIAN	14										
6G	1.7	197	9	9:30	4.47E-15	2.68E-13	2.68E-13	TH	173.	62.3	9.69E-06
6G	5B	197	9	9:30	1.34E-14	8.07E-13	8.07E-13	TH	91.5	0.0	2.91E-05
5G	3.4	196	9	9:30	1.60E-15	9.67E-14	9.67E-14	TH	315.	94.0	3.58E-06
4G	5.1	196	9	9:30	8.61E-16	5.17E-14	5.17E-14	TH	447.	118.	1.97E-06
3G	6.8	196	9	9:30	5.45E-16	3.27E-14	3.27E-14	TH	577.	140.	1.28E-06
2G	8.5	195	9	9:30	3.76E-16	2.25E-14	2.25E-14	TH	704.	159.	9.19E-07
1G	10.2	195	9	9:30	2.75E-16	1.65E-14	1.65E-14	TH	831.	177.	6.97E-07
1G	20.0	196	9	10:57	1.03E-16	6.20E-15	6.20E-15	TH	1529	0.0	2.61E-07
1G	30.0	196	9	12:25	5.71E-17	3.43E-15	3.43E-15	TH	2220	0.0	1.44E-07
1G	40.0	196	9	13:54	3.75E-17	2.25E-15	2.25E-15	TH	2900	0.0	9.51E-08
1G	50.0	196	9	15:22	2.71E-17	1.63E-15	1.63E-15	TH	3573	0.0	6.87E-08

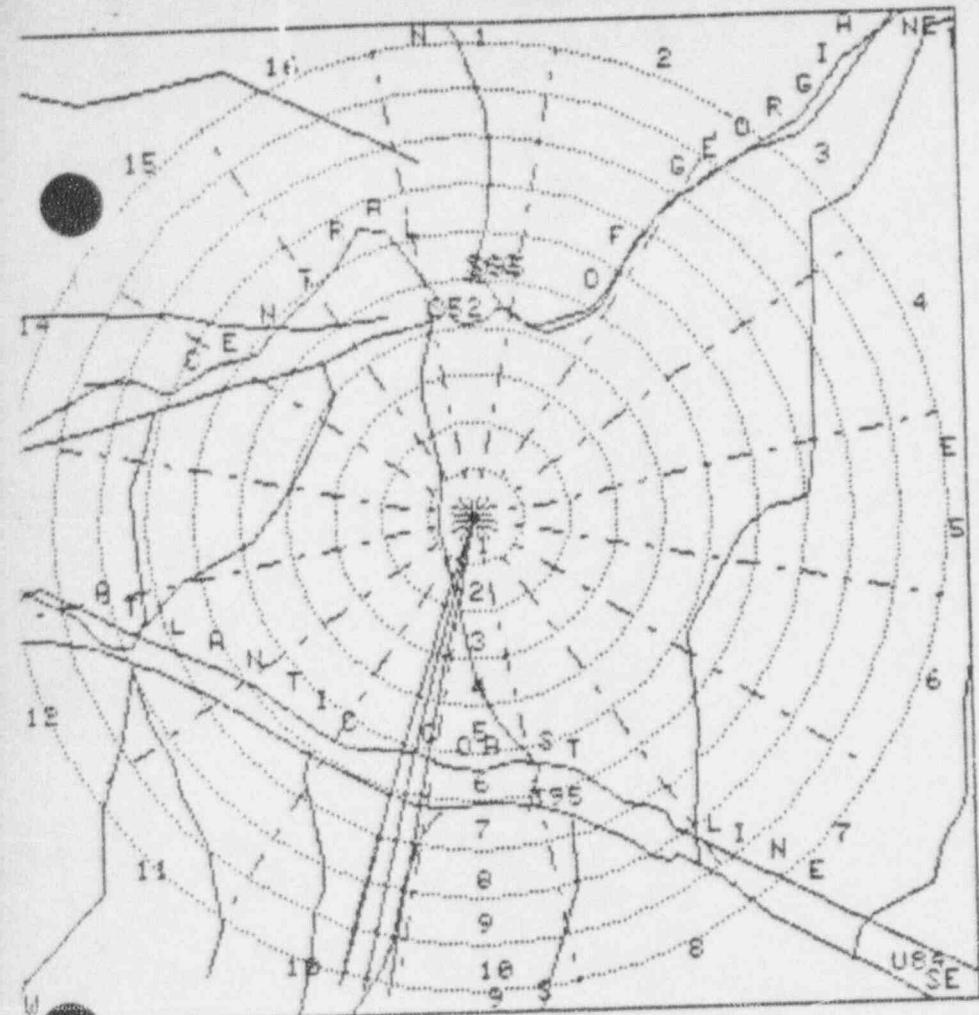
ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 09:33  
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.8 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 09:30 ON 83/01/14  
ABBRIVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JLIAN DAY =	14										
6E	1.7	197	9	9:30	2.63E+00	3.60E+00	3.60E+00	TH	173	61.4	5.00E-06
6E	SB	197	9	9:30	3.15E+00	4.31E+00	4.31E+00	TH	90.8	0.0	5.99E-06
5E	3.4	196	9	9:30	1.58E+00	2.18E+00	2.18E+00	TH	313	93.1	3.29E-06
4E	5.1	196	9	9:30	7.73E-01	1.07E+00	1.07E+00	TH	447	118.	1.84E-06
3E	6.8	196	9	9:30	4.19E-01	5.85E-01	5.85E-01	TH	577	140.	1.21E-06
2E	8.5	195	9	9:30	2.30E-01	3.23E-01	3.23E-01	TH	706	159.	8.88E-07
1E	10.2	195	9	9:30	5.05E-02	7.15E-02	7.15E-02	TH	834	177.	6.53E-07
1E	20.0	196	9	10:57	1.96E-02	2.77E-02	2.77E-02	TH	1531	0.0	2.53E-07
1E	30.0	196	9	12:25	1.09E-02	1.55E-02	1.55E-02	TH	2223	0.0	1.41E-07
1E	40.0	196	9	13:54	7.25E-03	1.02E-02	1.02E-02	TH	2903	0.0	9.37E-08
1E	50.0	196	9	15:22	5.25E-03	7.42E-03	7.42E-03	TH	3575	0.0	6.79E-08



ACTUAL INCIDENT

FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 09:34

ELEV: 6.8 MPH FROM 016 DEG, CLASS D

DATE: 83/01/14 -PLUME- TIME: 09:30

ROADS AND RAILROADS

TOGGLE	STATUS
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1. FEDERAL ROADS ON
2. STATE ROADS ON
3. COUNTY ROADS ON
4. RAILROADS ON
5. ALL ON
6. ALL OFF
7. EXIT

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 09:47

STABILITY CLASS D

DATE: 83/01/14

ELEV: 6.8 MPH FROM 017 DEG

CURRENT PLUME INFORMATION AS OF 09:45 ON 83/01/14  
PRESENT LOCATION

ID	MILE	DEG	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN		2.14*SIGMA	CHI/Q	
					WHOLE BODY	THYROID	DOSE RATE	ID			Y
JULIAN DAY = 14											
7G	1.7	197	9	9:45	4.28E-15	2.70E-13	2.70E-13	TH	174.	62.6	9.54E-06
7G	5.8	197	9	9:45	1.29E-14	8.20E-13	8.20E-13	TH	91.5	0.0	2.89E-05
6G	3.4	197	9	9:45	1.53E-15	9.70E-14	9.70E-14	TH	316.	94.4	3.51E-06
5G	5.1	197	9	9:45	8.39E-16	5.30E-14	5.30E-14	TH	450.	119.	1.97E-06
4G	6.8	196	9	9:45	5.33E-16	3.36E-14	3.36E-14	TH	578.	140.	1.29E-06
3G	8.5	196	9	9:45	3.71E-16	2.34E-14	2.34E-14	TH	705.	159.	9.26E-07
2G	10.2	196	9	9:45	2.72E-16	1.71E-14	1.71E-14	TH	831.	177.	7.02E-07
1G	11.9	195	9	9:45	2.07E-16	1.31E-14	1.31E-14	TH	956.	193.	5.55E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 09:47

STABILITY CLASS D

ITE: 83/01/14

EV: 6.8 MPH FROM 017 DEG

CURRENT PLUME INFORMATION AS OF 09:45 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JL1AN DAY =	14										
7E	1.7	197	9	9:45	2.65E+00	3.82E+00	3.82E+00	TH	174.	61.6	4.97E-06
7E	SB	197	9	9:45	3.20E+00	4.62E+00	4.62E+00	TH	90.8	0.0	6.00E-06
6E	3.4	197	9	9:45	1.59E+00	2.31E+00	2.31E+00	TH	315.	93.6	3.23E-06
5E	5.1	197	9	9:45	8.36E-01	1.22E+00	1.22E+00	TH	448.	118.	1.85E-06
4E	6.8	196	9	9:45	4.79E-01	7.05E-01	7.05E-01	TH	577.	140.	1.22E-06
3E	8.5	196	9	9:45	2.91E-01	4.31E-01	4.31E-01	TH	705.	159.	8.99E-07
2E	10.2	196	9	9:45	1.60E-01	2.39E-01	2.39E-01	TH	832.	176.	6.60E-07
1E	11.9	195	9	9:45	3.82E-02	5.73E-02	5.73E-02	TH	958.	193.	5.27E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 09:47

STABILITY CLASS D

TE: 83/01/14

EV: 6.8 MPH FROM 017 DEG

CURRENT PLUME INFORMATION AS OF 09:45 ON 83/01/14

ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
D MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JLIAN DAY	=	14									
7G	1.7	197	9	9:45	4.28E-15	2.70E-13	2.70E-13	TH	174.	62.6	9.54E-06
7G	8B	197	9	9:45	1.29E-14	8.20E-13	8.20E-13	TH	91.5	0.0	2.89E-05
6G	3.4	197	9	9:45	1.53E-15	9.70E-14	9.70E-14	TH	316.	94.4	3.51E-06
5G	5.1	197	9	9:45	8.39E-16	5.30E-14	5.30E-14	TH	450.	119.	1.97E-06
4G	6.8	196	9	9:45	5.33E-16	3.36E-14	3.36E-14	TH	578.	140.	1.29E-06
3G	8.5	196	9	9:45	3.71E-16	2.34E-14	2.34E-14	TH	705.	159.	9.26E-07
2G	10.2	196	9	9:45	2.72E-16	1.71E-14	1.71E-14	TH	831.	177.	7.02E-07
1G	11.9	195	9	9:45	2.07E-16	1.31E-14	1.31E-14	TH	956.	193.	5.55E-07
1G	20.0	196	9	10:56	9.77E-17	6.17E-15	6.17E-15	TH	1530	0.0	2.61E-07
1G	30.0	197	9	12:24	5.40E-17	3.41E-15	3.41E-15	TH	2221	0.0	1.44E-07
1G	40.0	197	9	13:52	3.55E-17	2.24E-15	2.24E-15	TH	2901	0.0	9.50E-08
1G	50.0	197	9	15:20	2.56E-17	1.62E-15	1.62E-15	TH	3574	0.0	6.36E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 09:48

STABILITY CLASS D

DATE: 83/01/14

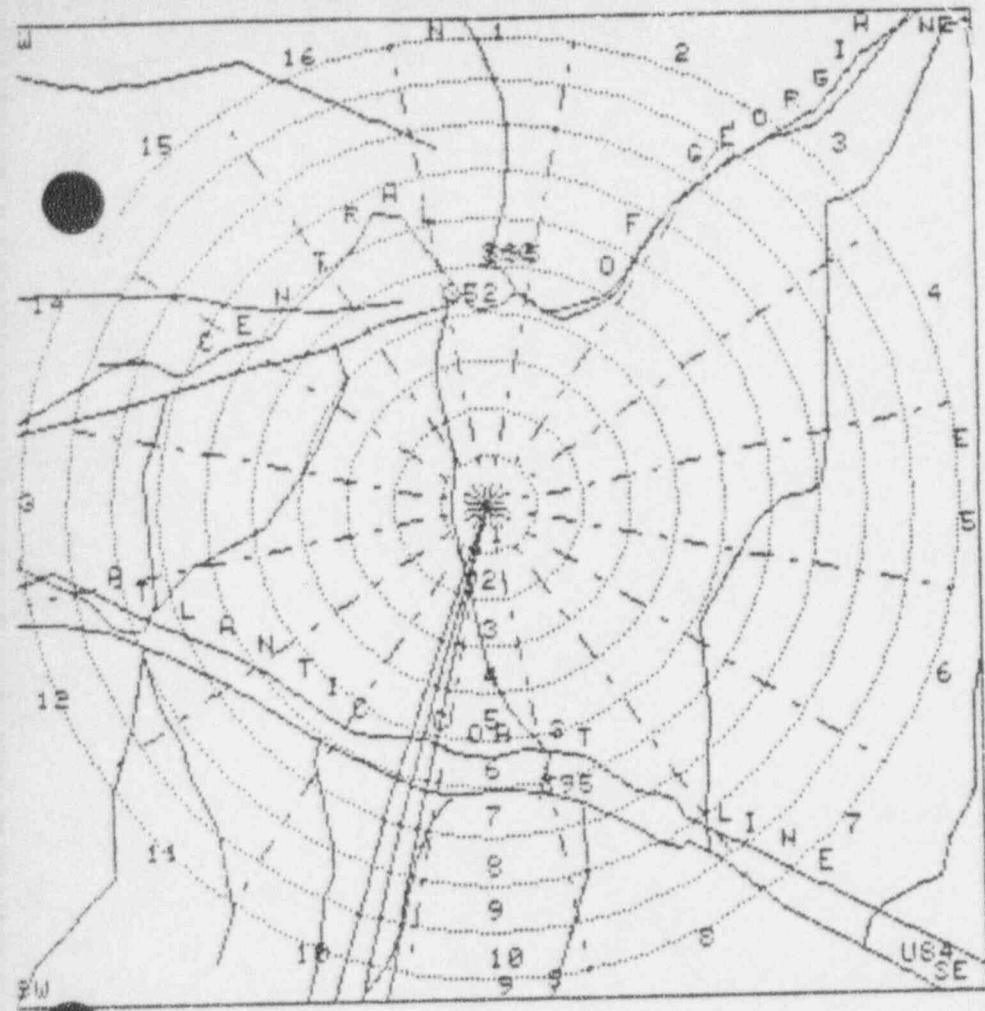
LEV: 6.8 MPH FROM 017 DEG

CURRENT PLUME INFORMATION AS OF 09:45 ON 83/01/14

ABBRREViated PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/R  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	TH	174	61.6	4.97E-06
ULIAN DAY =	14										
7E	1.7	197	9	9:45	2.65E+00	3.82E+00	3.82E+00	TH	90.8	0.0	6.00E-06
7E	SB	197	9	9:45	3.20E+00	4.62E+00	4.62E+00	TH	315	93.6	3.23E-06
6E	3.4	197	9	9:45	1.59E+00	2.31E+00	2.31E+00	TH	448	118	1.85E-06
5E	5.1	197	9	9:45	8.36E-01	1.22E+00	1.22E+00	TH	577	140	1.22E-06
4E	6.8	196	9	9:45	4.79E-01	7.05E-01	7.05E-01	TH	705	159	8.99E-07
3E	8.5	196	9	9:45	2.91E-01	4.31E-01	4.31E-01	TH	832	176	6.60E-07
2E	10.2	196	9	9:45	1.60E-01	2.39E-01	2.39E-01	TH	959	193	5.27E-07
1E	11.9	195	9	9:45	3.82E-02	5.73E-02	5.73E-02	TH	1531	0.0	2.53E-07
1E	20.0	196	9	10:56	1.83E-02	2.76E-02	2.76E-02	TH	2223	0.0	1.41E-07
1E	30.0	197	9	12:24	1.02E-02	1.54E-02	1.54E-02	TH	2903	0.0	9.37E-08
1E	40.0	197	9	13:52	6.79E-03	1.02E-02	1.02E-02	TH	3575	0.0	6.79E-08
1E	50.0	197	9	15:20	4.92E-03	7.39E-03	7.39E-03	TH			



ACTUAL INCIDENT  
 FARLEY NUCLEAR PLANT  
 DATE: 83/01/14 -DAY- TIME: 09:49  
 ELEV: 6.8 MPH FROM 017 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 09:45

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:02

STABILITY CLASS D

TE: 83/01/14

EV: 6.9 MPH FROM 018 DEG

CURRENT PLUME INFORMATION AS OF 10:00 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
D MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

LIAN DAY = 14

8G	1.7	198	9	10: 0	4.06E-15	2.69E-13	2.69E-13	TH	176.	62.9	9.31E-06
8G	5B	198	9	10: 0	1.25E-14	8.28E-13	8.28E-13	TH	91.5	0.0	2.86E-05
7G	3.4	198	9	10: 0	1.46E-15	9.71E-14	9.71E-14	TH	319.	94.9	3.44E-06
6G	5.1	198	9	10: 0	8.00E-16	5.30E-14	5.30E-14	TH	454.	120.	1.92E-06
5G	6.8	197	9	10: 0	5.19E-16	3.44E-14	3.44E-14	TH	583.	141.	1.28E-06
4G	8.5	197	9	10: 0	3.62E-16	2.40E-14	2.40E-14	TH	709.	160.	9.25E-07
3G	10.2	196	9	10: 0	2.68E-16	1.77E-14	1.77E-14	TH	833.	177.	7.06E-07
2G	11.9	196	9	10: 0	2.05E-16	1.35E-14	1.35E-14	TH	957.	193.	5.58E-07
1G	13.6	196	9	10: 0	1.61E-16	1.07E-14	1.07E-14	TH	1082	208.	4.55E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 10:02  
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.9 MPH FROM 018 DEG

CURRENT PLUME INFORMATION AS OF 10:00 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
TULIAN DAY =	14										
8E	1.7	198	9	10: 0	2.60E+00	3.95E+00	3.95E+00	TH	175.	62.0	4.91E-06
8E	SB	198	9	10: 0	3.19E+00	4.85E+00	4.85E+00	TH	90.8	0.0	6.02E-06
7E	3.4	198	9	10: 0	1.59E+00	2.43E+00	2.43E+00	TH	318.	94.0	3.17E-06
6E	5.1	198	9	10: 0	8.41E-01	1.29E+00	1.29E+00	TH	451.	119.	1.82E-06
5E	6.8	197	9	10: 0	5.17E-01	8.03E-01	8.03E-01	TH	580.	140.	1.22E-06
4E	8.5	197	9	10: 0	3.31E-01	5.18E-01	5.18E-01	TH	706.	159.	9.02E-07
3E	10.2	196	9	10: 0	2.02E-01	3.18E-01	3.18E-01	TH	832.	176.	6.66E-07
2E	11.9	196	9	10: 0	1.21E-01	1.91E-01	1.91E-01	TH	957.	193.	5.31E-07
1E	13.6	196	9	10: 0	2.96E-02	4.72E-02	4.72E-02	TH	1083	208.	4.36E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:03

ATE: 83/01/14

STABILITY CLASS D

LEV: 6.9 MPH FROM 018 DEG

CURRENT PLUME INFORMATION AS OF 10:00 ON 83/01/14

ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q

ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

ULIAN DAY = 14

8G	1.7	198	9	10: 0	4.06E-15	2.69E-13	2.69E-13	TH	176.	62.9	9.31E-06
8G	SB	198	9	10: 0	1.25E-14	8.28E-13	8.28E-13	TH	91.5	0.0	2.86E-05
7G	3.4	198	9	10: 0	1.46E-15	9.71E-14	9.71E-14	TH	319.	94.9	3.44E-06
6G	5.1	198	9	10: 0	8.00E-16	5.30E-14	5.30E-14	TH	454.	120.	1.92E-06
5G	6.8	197	9	10: 0	5.19E-16	3.44E-14	3.44E-14	TH	583.	141.	1.28E-06
4G	8.5	197	9	10: 0	3.62E-16	2.40E-14	2.40E-14	TH	709.	160.	9.25E-07
3G	10.2	196	9	10: 0	2.68E-16	1.77E-14	1.77E-14	TH	833.	177.	7.06E-07
2G	11.9	196	9	10: 0	2.05E-16	1.35E-14	1.35E-14	TH	957.	193.	5.58E-07
1G	13.6	196	9	10: 0	1.61E-16	1.07E-14	1.07E-14	TH	1082	208.	4.55E-07
1G	20.0	196	9	10:55	9.25E-17	6.13E-15	6.13E-15	TH	1531	0.0	2.60E-07
1G	30.0	197	9	12:22	5.12E-17	3.39E-15	3.39E-15	TH	2222	0.0	1.44E-07
1G	40.0	197	9	13:49	3.37E-17	2.23E-15	2.23E-15	TH	2902	0.0	9.50E-08
1G	50.0	198	9	15:17	2.43E-17	1.61E-15	1.61E-15	TH	3575	0.0	6.86E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

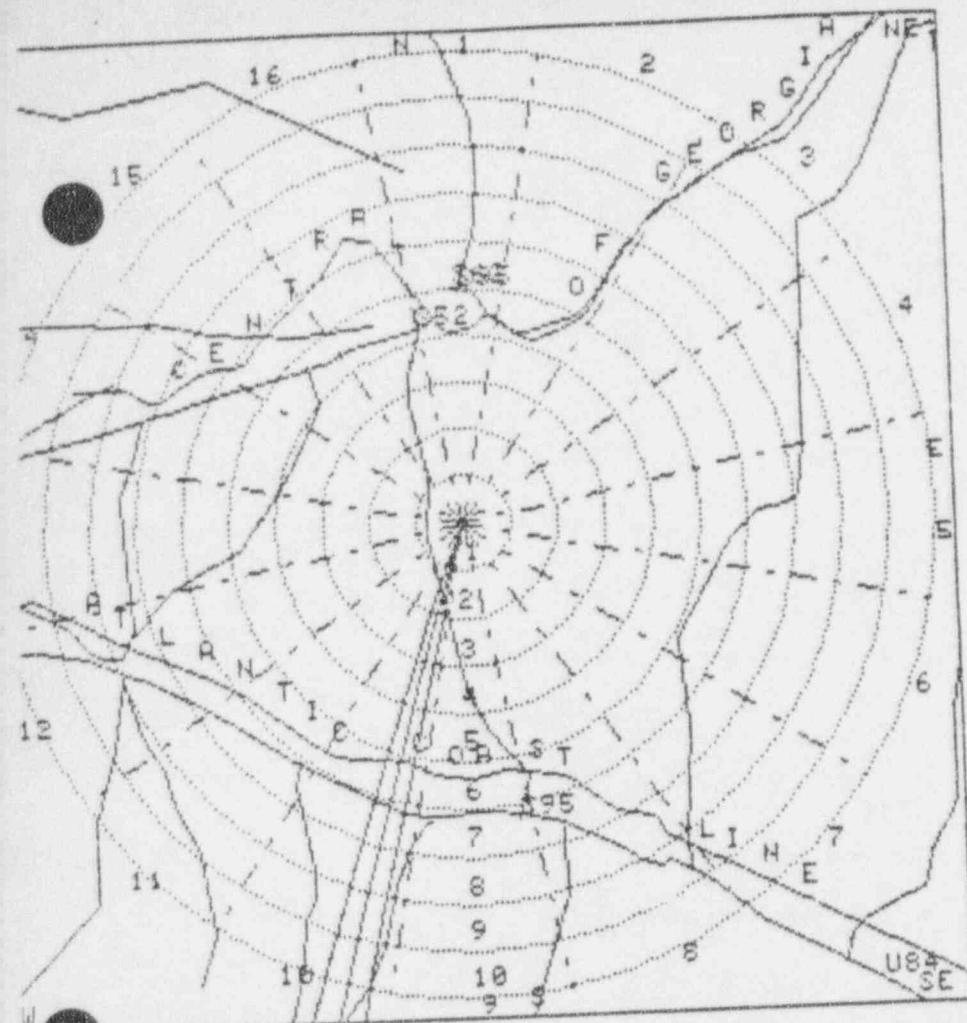
DATE: 83/01/14  
EV: 6.9 MPH FROM 018 DEG

TIME: 10:03  
STABILITY CLASS D

CURRENT PLUME INFORMATION AS OF 10:00 ON 83/01/14  
ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z		
ULIAN DAY =	14										
SE	1.7	198	9	10: 0	2.60E+00	3.95E+00	3.95E+00	TH	175.	62.0	4.91E-06
SE	SB	198	9	10: 0	3.19E+00	4.85E+00	4.85E+00	TH	90.8	0.0	6.02E-06
ZE	3.4	198	9	10: 0	1.59E+00	2.43E+00	2.43E+00	TH	318.	94.0	3.17E-06
ZE	5.1	198	9	10: 0	8.41E-01	1.29E+00	1.29E+00	TH	451.	119.	1.82E-06
ZE	6.8	197	9	10: 0	5.17E-01	8.03E-01	8.03E-01	TH	580.	140.	1.22E-06
ZE	8.5	197	9	10: 0	3.31E-01	5.18E-01	5.18E-01	TH	706.	159.	9.02E-07
ZE	10.2	196	9	10: 0	2.02E-01	3.18E-01	3.18E-01	TH	832.	176.	6.66E-07
ZE	11.9	196	9	10: 0	1.21E-01	1.91E-01	1.91E-01	TH	957.	193.	5.31E-07
ZE	13.6	196	9	10: 0	2.96E-02	4.72E-02	4.72E-02	TH	1083	208.	4.36E-07
ZE	20.0	196	9	10: 55	1.72E-02	2.74E-02	2.74E-02	TH	1532	0.0	2.53E-07
ZE	30.0	197	9	12:22	9.64E-03	1.53E-02	1.53E-02	TH	2223	0.0	1.41E-07
ZE	40.0	197	9	13:49	6.37E-03	1.01E-02	1.01E-02	TH	2903	0.0	9.37E-08
ZE	50.0	198	9	15:17	4.61E-03	7.35E-03	7.35E-03	TH	3576	0.0	6.79E-08



ACTUAL INCIDENT

FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 10:04  
 ELEV: 6.9 MPH FROM 018 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 10:00

ROADS AND RAILROADS	STATUS
TOGGLE	
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 10:17  
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.9 MPH FROM 019 DEG

CURRENT PLUME INFORMATION AS OF 10:15 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CH1/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY =	14										
9G	1.7	199	9	10:15	3.88E-15	2.70E-13	2.70E-13	TH	177.	63.2	9.17E-06
9G	5B	199	9	10:15	1.20E-14	8.38E-13	8.38E-13	TH	91.5	0.0	2.84E-05
8G	3.5	199	9	10:15	1.39E-15	9.71E-14	9.71E-14	TH	321.	95.3	3.37E-06
7G	5.2	198	9	10:15	7.66E-16	5.32E-14	5.32E-14	TH	457.	120.	1.89E-06
6G	6.9	198	9	10:15	4.96E-16	3.45E-14	3.45E-14	TH	587.	141.	1.26E-06
5G	8.5	198	9	10:15	3.54E-16	2.46E-14	2.46E-14	TH	714.	160.	9.24E-07
4G	10.2	197	9	10:15	2.62E-16	1.82E-14	1.82E-14	TH	837.	177.	7.05E-07
3G	11.9	197	9	10:15	2.02E-16	1.40E-14	1.40E-14	TH	960.	193.	5.61E-07
2G	13.6	196	9	10:15	1.59E-16	1.10E-14	1.10E-14	TH	1083	208.	4.57E-07
1G	15.4	196	9	10:15	1.28E-16	8.94E-15	8.94E-15	TH	1206	222.	3.82E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:17

STABILITY CLASS D

DATE: 83/01/14

LEV: 6.9 MPH FROM 019 DEG

CURRENT PLUME INFORMATION AS OF 10:15 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CH1/Q  
ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JULIAN DAY = 14											
ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
9E	1.7	199	9	10:15	2.55E+00	4.09E+00	4.09E+00	TH	176.	62.3	4.88E-06
9E	SB	199	9	10:15	3.16E+00	5.06E+00	5.06E+00	TH	90.8	0.0	6.04E-06
8E	3.5	199	9	10:15	1.54E+00	2.49E+00	2.49E+00	TH	320.	94.5	3.11E-06
7E	5.2	198	9	10:15	8.41E-01	1.36E+00	1.36E+00	TH	454.	119.	1.79E-06
6E	6.9	198	9	10:15	5.21E-01	8.52E-01	8.52E-01	TH	584.	141.	1.20E-06
5E	8.5	198	9	10:15	3.58E-01	5.90E-01	5.90E-01	TH	709.	159.	9.04E-07
4E	10.2	197	9	10:15	2.30E-01	3.82E-01	3.82E-01	TH	834.	177.	6.68E-07
3E	11.9	197	9	10:15	1.52E-01	2.54E-01	2.54E-01	TH	958.	193.	5.35E-07
2E	13.6	196	9	10:15	9.40E-02	1.57E-01	1.57E-01	TH	1083	208.	4.38E-07
1E	15.4	196	9	10:15	2.35E-02	3.97E-02	3.97E-02	TH	1206	222.	3.68E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:18

STABILITY CLASS D

DATE: 83/01/14

ELEV: 6.9 MPH FROM 019 DEG

CURRENT PLUME INFORMATION AS OF 10:15 ON 83/01/14

ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JULIAN DAY	MILE	DEG	SEC	TIME	DOSE RATE	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	CHI/Q
14												
9G	1.7	199	9	10:15	3.88E-15	2.70E-13	2.70E-13	TH	177.	63.2	9.17E-06	
9G	SB	199	9	10:15	1.20E-14	8.38E-13	8.38E-13	TH	91.5	0.0	2.84E-05	
8G	3.5	199	9	10:15	1.39E-15	9.71E-14	9.71E-14	TH	321.	95.3	3.37E-06	
7G	5.2	198	9	10:15	7.66E-16	5.32E-14	5.32E-14	TH	457.	120.	1.89E-06	
6G	6.9	198	9	10:15	4.96E-16	3.45E-14	3.45E-14	TH	587.	141.	1.26E-06	
5G	8.5	198	9	10:15	3.54E-16	2.46E-14	2.46E-14	TH	714.	160.	9.24E-07	
4G	10.2	197	9	10:15	2.62E-16	1.82E-14	1.82E-14	TH	837.	177.	7.05E-07	
3G	11.9	197	9	10:15	2.02E-16	1.40E-14	1.40E-14	TH	960.	193.	5.61E-07	
2G	13.6	196	9	10:15	1.59E-16	1.10E-14	1.10E-14	TH	1083	208.	4.57E-07	
1G	15.4	196	9	10:15	1.28E-16	8.94E-15	8.94E-15	TH	1206	222.	3.82E-07	
1G	20.0	197	9	10:55	8.78E-17	6.10E-15	6.10E-15	TH	1532	0.0	2.60E-07	
1G	30.0	197	9	12:21	4.86E-17	3.38E-15	3.38E-15	TH	2223	0.0	1.44E-07	
1G	40.0	198	9	13:48	3.19E-17	2.22E-15	2.22E-15	TH	2903	0.0	9.49E-08	
1G	50.0	198	9	15:15	2.31E-17	1.60E-15	1.60E-15	TH	3576	0.0	6.86E-08	

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:18

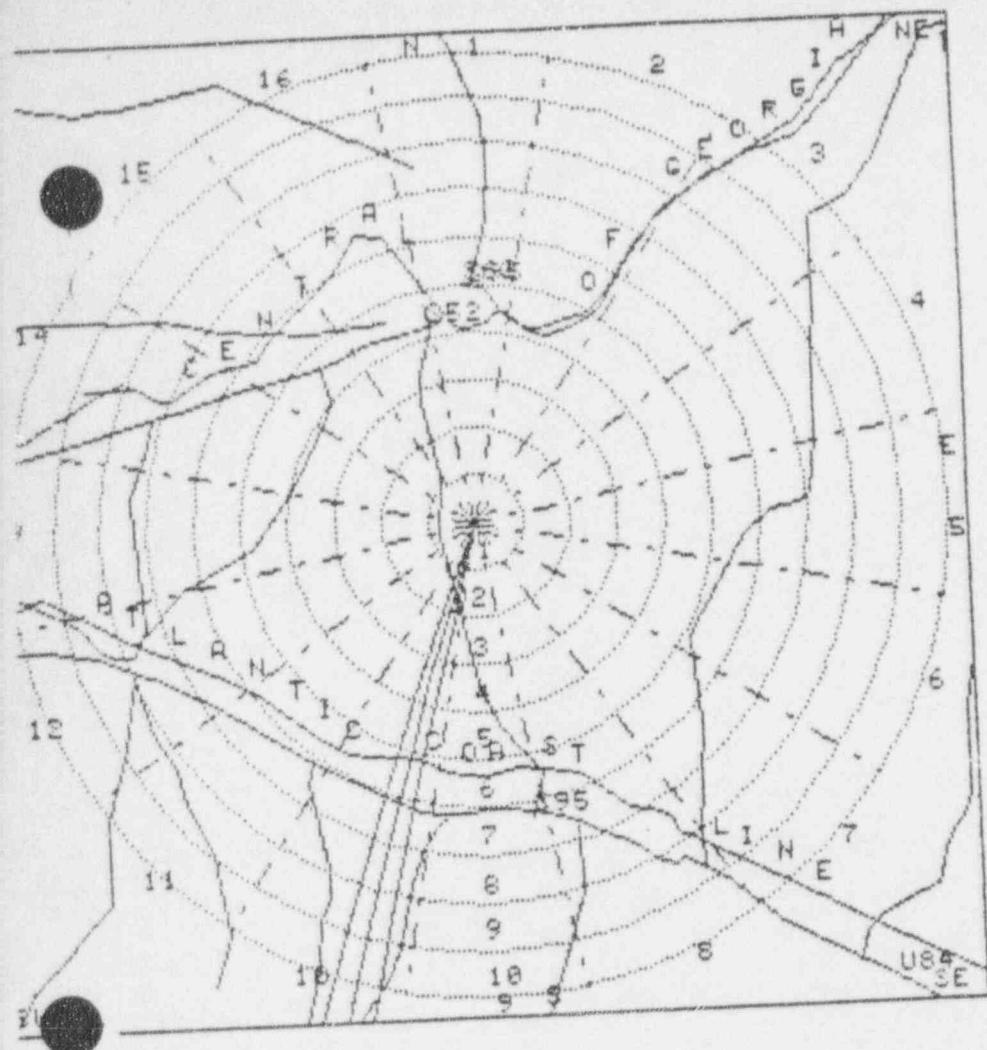
STABILITY CLASS D

DATE: 83/01/14

LEV: 6.9 MPH FROM 019 DEG

CURRENT PLUME INFORMATION AS OF 10:15 ON 83/01/14  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	TH	Y	Z	
ULIAN DAY =	14										
9E	1.7	199	9	10:15	2.55E+00	4.09E+00	4.09E+00	TH	176.	62.3	4.88E-06
9E	58	199	9	10:15	3.16E+00	5.06E+00	5.06E+00	TH	90.8	0.0	6.04E-06
8E	3.5	199	9	10:15	1.54E+00	2.49E+00	2.49E+00	TH	320.	94.5	3.11E-06
7E	5.2	198	9	10:15	8.41E-01	1.36E+00	1.36E+00	TH	454.	119.	1.79E-06
6E	6.9	198	9	10:15	5.21E-01	8.52E-01	8.52E-01	TH	584.	141.	1.20E-06
5E	8.5	198	9	10:15	3.58E-01	5.90E-01	5.90E-01	TH	709.	159.	9.04E-07
4E	10.2	197	9	10:15	2.30E-01	3.82E-01	3.82E-01	TH	834.	177.	6.68E-07
3E	11.9	197	9	10:15	1.52E-01	2.54E-01	2.54E-01	TH	958.	193.	5.35E-07
2E	13.6	196	9	10:15	9.40E-02	1.57E-01	1.57E-01	TH	1083	208.	4.38E-07
1E	15.4	196	9	10:15	2.35E-02	3.97E-02	3.97E-02	TH	1206	222.	3.68E-07
1E	20.0	197	9	10:55	1.61E-02	2.73E-02	2.73E-02	TH	1532	0.0	2.53E-07
1E	30.0	197	9	12:21	9.05E-03	1.53E-02	1.53E-02	TH	2223	0.0	1.41E-07
1E	40.0	198	9	13:48	5.98E-03	1.01E-02	1.01E-02	TH	2903	0.0	9.37E-08
1E	50.0	198	9	15:15	4.33E-03	7.32E-03	7.32E-03	TH	3576	0.0	6.79E-08



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 10:19  
ELEV: 6.9 MPH FROM 019 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 10:15

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:32

STABILITY CLASS D

ITE: 83/01/14

EV: 6.6 MPH FROM 022 DEG

CURRENT PLUME INFORMATION AS OF 10:30 ON 83/01/14  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JLJAN DAY =	14										
10G	1.6	202	9	10:30	4.34E-15	3.15E-13	3.15E-13	TH	168.	61.1	1.05E-05
10G	5.8	202	9	10:30	1.24E-14	9.03E-13	9.03E-13	TH	91.5	0.0	3.01E-05
9G	3.4	201	9	10:30	1.46E-15	1.06E-13	1.06E-13	TH	305.	92.1	3.64E-06
8G	5.1	200	9	10:30	7.78E-16	5.66E-14	5.66E-14	TH	443.	118.	1.97E-06
7G	6.8	199	9	10:30	4.98E-16	3.62E-14	3.62E-14	TH	575.	140.	1.29E-06
6G	8.5	199	9	10:30	3.52E-16	2.55E-14	2.55E-14	TH	702.	159.	9.39E-07
5G	10.2	198	9	10:30	2.64E-16	1.92E-14	1.92E-14	TH	827.	176.	7.26E-07
4G	11.9	198	9	10:30	2.03E-16	1.48E-14	1.48E-14	TH	949.	192.	5.75E-07
3G	13.6	197	9	10:30	1.61E-16	1.17E-14	1.17E-14	TH	1072	207.	4.70E-07
2G	15.3	197	9	10:30	1.29E-16	9.44E-15	9.44E-15	TH	1194	221.	3.91E-07
1G	17.0	197	9	10:30	1.06E-16	7.74E-15	7.74E-15	TH	1316	234.	3.32E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 10:32  
STABILITY CLASS D

ATE: 83/01/14

LEV: 6.6 MPH FROM 022 DEG

CURRENT PLUME INFORMATION AS OF 10:30 ON 83/01/14  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
ULIAN DAY =	14										
10E	1.6	202	9	10:30	2.64E+00	4.44E+00	4.44E+00	TH	168	60.1	5.18E-06
10E	SB	202	9	10:30	3.01E+00	5.07E+00	5.07E+00	TH	90.8	0.0	5.91E-06
9E	3.4	201	9	10:30	1.57E+00	2.67E+00	2.67E+00	TH	313	93.1	3.20E-06
8E	5.1	200	9	10:30	8.43E-01	1.44E+00	1.44E+00	TH	449	118	1.80E-06
7E	6.8	199	9	10:30	5.33E-01	9.17E-01	9.17E-01	TH	580	140	1.20E-06
6E	8.5	199	9	10:30	3.68E-01	6.37E-01	6.37E-01	TH	706	159	9.02E-07
5E	10.2	198	9	10:30	2.53E-01	4.41E-01	4.41E-01	TH	830	176	6.79E-07
4E	11.9	198	9	10:30	1.76E-01	3.09E-01	3.09E-01	TH	953	192	5.43E-07
3E	13.6	197	9	10:30	1.19E-01	2.11E-01	2.11E-01	TH	1077	207	4.46E-07
2E	15.3	197	9	10:30	7.52E-02	1.33E-01	1.33E-01	TH	1200	221	3.73E-07
1E	17.0	197	9	10:30	1.91E-02	3.42E-02	3.42E-02	TH	1322	235	3.19E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:33

STABILITY CLASS D

ITE: 83/01/14

EV: 6.6 MPH FROM 022 DEG

CURRENT PLUME INFORMATION AS OF 10:30 ON 83/01/14  
ABBRIVIATED PROJECTINDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
D MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JULIAN DAY	D	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	CHI/Q
14	LOG	1.6	202	9	10:30	4.34E-15	3.15E-13	3.15E-13	TH	168.	61.1	1.05E-05
	10G	SB	202	9	10:30	1.24E-14	9.03E-13	9.03E-13	TH	91.5	0.0	3.01E-05
	9G	3.4	201	9	10:30	1.46E-15	1.06E-13	1.06E-13	TH	305.	92.1	3.64E-06
	8G	5.1	200	9	10:30	7.78E-16	5.66E-14	5.66E-14	TH	443.	118.	1.97E-06
	7G	6.8	199	9	10:30	4.98E-16	3.62E-14	3.62E-14	TH	575.	140.	1.29E-06
	6G	8.5	199	9	10:30	3.52E-16	2.55E-14	2.55E-14	TH	702.	159.	9.39E-07
	5G	10.2	198	9	10:30	2.64E-16	1.92E-14	1.92E-14	TH	827.	176.	7.26E-07
	4G	11.9	198	9	10:30	2.03E-16	1.48E-14	1.48E-14	TH	949.	192.	5.75E-07
	3G	13.6	197	9	10:30	1.61E-16	1.17E-14	1.17E-14	TH	1072	207.	4.70E-07
	2G	15.3	197	9	10:30	1.29E-16	9.44E-15	9.44E-15	TH	1194	221.	3.91E-07
	1G	17.0	197	9	10:30	1.06E-16	7.74E-15	7.74E-15	TH	1316	234.	3.32E-07
	1G	20.0	197	9	10:57	8.39E-17	6.10E-15	6.10E-15	TH	1527	0.0	2.62E-07
	1G	30.0	199	9	12:29	4.63E-17	3.37E-15	3.37E-15	TH	2220	0.0	1.44E-07
	1G	40.0	200	9	14: 1	3.04E-17	2.21E-15	2.21E-15	TH	2900	0.0	9.51E-08
	1G	50.0	200	9	15:32	2.20E-17	1.60E-15	1.60E-15	TH	3574	0.0	6.86E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:33

DATE: 83/01/14

STABILITY CLASS D

ELEV: 6.6 MPH FROM 022 DEG

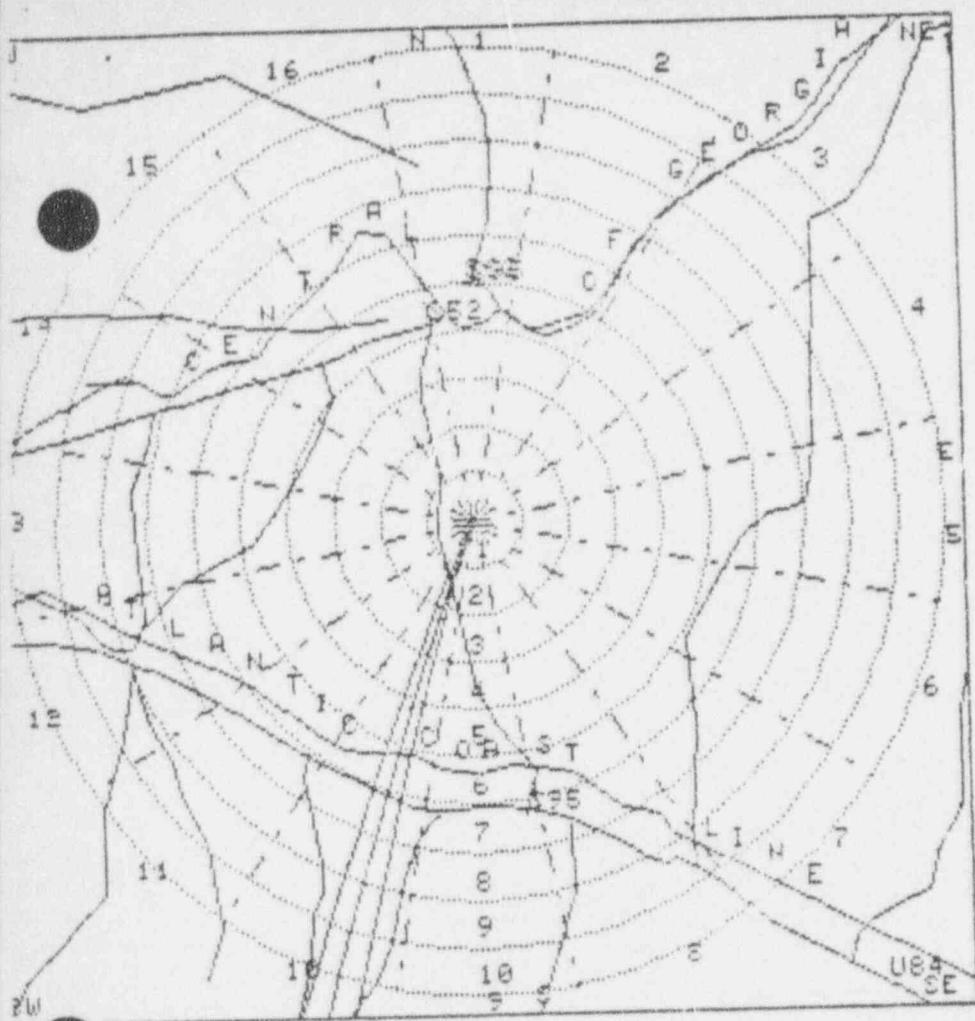
CURRENT PLUME INFORMATION AS OF 10:30 ON 83/01/14

ABBREVIATED PROJECTION

				DOSE RATE (MR/HR)	HIGH DOSE ORGAN	2.14*SIGMA	CHI/G
ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID Y Z

JULIAN DAY = 14

10E	1.6	202	9	10:30	2.64E+00	4.44E+00	4.44E+00	TH	168.	60.1	5.19E-06
10E	SB	202	9	10:30	3.01E+00	5.07E+00	5.07E+00	TH	90.8	0.0	5.91E-06
9E	3.4	201	9	10:30	1.57E+00	2.67E+00	2.67E+00	TH	313.	93.1	3.20E-06
BE	5.1	200	9	10:30	8.43E-01	1.44E+00	1.44E+00	TH	449.	118.	1.80E-06
7E	6.8	199	9	10:30	5.33E-01	9.17E-01	9.17E-01	TH	580.	140.	1.20E-06
6E	8.5	199	9	10:30	3.68E-01	6.37E-01	6.37E-01	TH	706.	159.	9.02E-07
5E	10.2	198	9	10:30	2.53E-01	4.41E-01	4.41E-01	TH	830.	176.	6.79E-07
4E	11.9	198	9	10:30	1.76E-01	3.09E-01	3.09E-01	TH	953.	192.	5.43E-07
3E	13.6	197	9	10:30	1.19E-01	2.11E-01	2.11E-01	TH	1077	207.	4.46E-07
2E	15.3	197	9	10:30	7.52E-02	1.33E-01	1.33E-01	TH	1200	221.	3.73E-07
1E	17.0	197	9	10:30	1.91E-02	3.42E-02	3.42E-02	TH	1322	235.	3.19E-07
1E	20.0	197	9	10:57	1.51E-02	2.72E-02	2.72E-02	TH	1533	0.0	2.53E-07
1E	30.0	199	9	12:29	8.49E-03	1.52E-02	1.52E-02	TH	2226	0.0	1.41E-07
1E	40.0	200	9	14: 1	5.61E-03	1.00E-02	1.00E-02	TH	2907	0.0	9.35E-08
1E	50.0	200	9	15:32	4.06E-03	7.28E-03	7.28E-03	TH	3580	0.0	6.77E-09



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 0:354  
ELEV: 6.6 MPH FROM 022 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 10:30

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

JINTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:45

DATE: 03/01/19

STABILITY CLASS D

ELEV: 6.2 MPH FROM 025 DEG

CURRENT PLUME INFORMATION AS OF 10:45 ON 03/01/19  
PRESENT LOCATION

ID	MILE	DEC	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN 2.14#SIGMA		CHI/Q	
					WHOLE BODY	THYROID	DOSE RATE ID	Y	Z	
JULIAN DAY = 19										
11G 1.5 206	9	10:45		4.92E-15	3.74E-13	3.74E-13	TH 160	58.8	1.22E-05	
11G SB 206	9	10:45		1.28E-14	9.78E-13	9.78E-13	TH 91.5	0.0	3.21E-05	
10G 3.2 204	9	10:45		1.65E-15	1.26E-13	1.26E-13	TH 289	88.8	4.22E-06	
9C 4.9 202	9	10:45		8.23E-16	6.26E-14	6.26E-14	TH 420	114	2.14E-06	
8G 6.6 201	9	10:45		5.13E-16	3.90E-14	3.90E-14	TH 553	136	1.36E-06	
7G 8.3 200	9	10:45		3.58E-16	2.72E-14	2.72E-14	TH 682	156	9.78E-07	
6G 10.0 200	9	10:45		2.66E-16	2.02E-14	2.02E-14	TH 808	174	7.46E-07	
5G 11.7 199	9	10:45		2.07E-16	1.58E-14	1.58E-14	TH 932	190	5.98E-07	
4G 13.4 199	9	10:45		1.64E-16	1.24E-14	1.24E-14	TH 1053	205	4.86E-07	
3G 15.1 198	9	10:45		1.32E-16	1.00E-14	1.00E-14	TH 1174	219	4.05E-07	
2G 16.8 198	9	10:45		1.08E-16	8.24E-15	8.24E-15	TH 1296	232	3.43E-07	
1G 18.5 197	9	10:45		9.01E-17	6.85E-15	6.85E-15	TH 1417	245	2.95E-07	

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:48

STABILITY CLASS D

DATE: 83/01/19

ELEV: 6.2 MPH FROM 025 DEG

CURRENT PLUME INFORMATION AS OF 10:45 ON 83/01/19

PRESENT LOCATION

ID	MILE	DEC	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN	2.14*SIGMA	CHI/O	
					WHOLE BODY	THYROID	DOSE RATE ID	Y	Z	
JULIAN DAY = 19										
11E	1.5	206	9	10:45	9.80E+01	2.89E+02	2.89E+02	TH 159.	57.8	5.48E-06
11E	SB	206	9	10:45	1.02E+02	3.02E+02	3.02E+02	TH 90.8	0.0	5.74E-06
10E	3.2	204	9	10:45	1.74E+00	3.11E+00	3.11E+00	TH 297.	89.8	3.64E-06
9E	4.9	202	9	10:45	8.86E-01	1.59E+00	1.59E+00	TH 435.	116.	1.91E-06
8E	6.6	201	9	10:45	5.44E-01	9.83E-01	9.83E-01	TH 567.	138.	1.23E-06
7E	8.3	200	9	10:45	3.82E-01	6.96E-01	6.96E-01	TH 695.	157.	7.20E-07
6E	10.0	200	9	10:45	2.63E-01	4.82E-01	4.82E-01	TH 820.	175.	6.86E-07
5E	11.7	199	9	10:45	1.95E-01	3.61E-01	3.61E-01	TH 942.	191.	5.58E-07
4E	13.4	199	9	10:45	1.39E-01	2.59E-01	2.59E-01	TH 1065	206.	4.57E-07
3E	15.1	198	9	10:45	9.68E-02	1.81E-01	1.81E-01	TH 1186	220.	3.83E-07
2E	16.8	198	9	10:45	6.18E-02	1.16E-01	1.16E-01	TH 1309	233.	3.26E-07
1E	18.5	197	9	10:45	1.59E-02	3.01E-02	3.01E-02	TH 1431	246.	2.82E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 10:49

STABILITY CLASS D

DATE: 83/01/19

ELEV: 6.2 MPH FROM 025 DEG

CURRENT PLUME INFORMATION AS OF 10:45 ON 83/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14SIGMA CHI/Q  
DOSE RATE ID Y Z  
ID MILE DEG SEC TIME WHOLE BODY THYROID

JULIAN DAY	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
11G	1.5	206	9	10:45	4.92E-15	3.74E-13	3.74E-13	TH	160.	58.8	1.22E-05
11G	SB	206	9	10:45	1.28E-14	9.78E-13	9.78E-13	TH	91.5	0.0	3.21E-05
10G	3.2	204	9	10:45	1.65E-15	1.26E-13	1.26E-13	TH	289.	88.8	4.22E-06
9G	4.9	202	9	10:45	8.23E-16	6.26E-14	6.26E-14	TH	420.	114.	2.14E-06
8G	6.6	201	9	10:45	5.13E-16	3.90E-14	3.90E-14	TH	553.	136.	1.36E-06
7G	8.3	200	9	10:45	3.58E-16	2.72E-14	2.72E-14	TH	682.	156.	9.78E-07
6G	10.0	200	9	10:45	2.66E-16	2.02E-14	2.02E-14	TH	808.	174.	7.46E-07
5G	11.7	199	9	10:45	2.07E-16	1.58E-14	1.58E-14	TH	932.	190.	5.98E-07
4G	13.4	199	9	10:45	1.64E-16	1.24E-14	1.24E-14	TH	1053	205.	4.86E-07
3G	15.1	198	9	10:45	1.32E-16	1.00E-14	1.00E-14	TH	1174	219.	4.05E-07
2G	16.8	198	9	10:45	1.08E-16	8.24E-15	8.24E-15	TH	1296	232.	3.43E-07
1G	18.5	197	9	10:45	9.01E-17	6.85E-15	6.85E-15	TH	1417	245.	2.95E-07
1G	20.0	198	9	10:59	8.04E-17	6.12E-15	6.12E-15	TH	1521	0.0	2.63E-07
1G	30.0	200	9	12:38	4.42E-17	3.36E-15	3.36E-15	TH	2216	0.0	1.45E-07
1G	40.0	202	9	14:15	2.90E-17	2.21E-15	2.21E-15	TH	2898	0.0	9.52E-08
1G	50.0	202	9	15:53	2.09E-17	1.59E-15	1.59E-15	TH	3572	0.0	6.87E-09

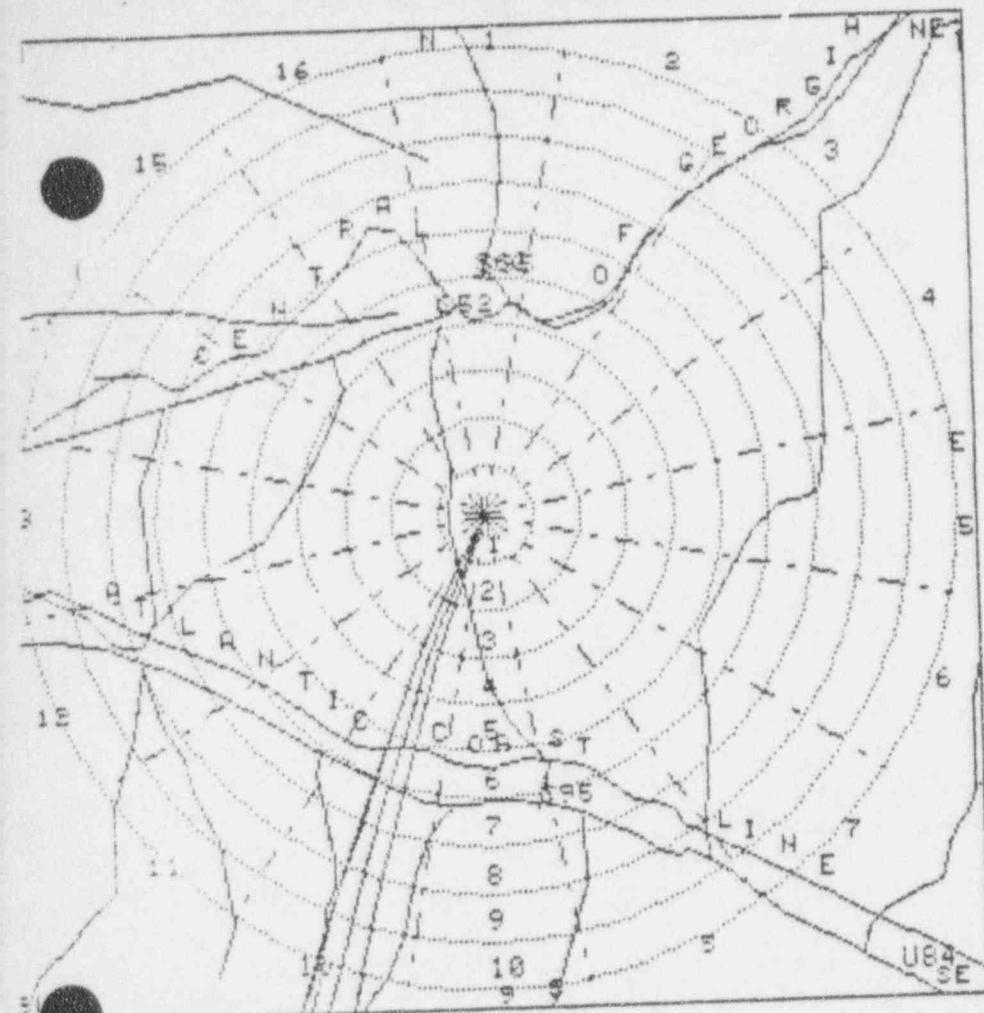
ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 10:49  
STABILITY CLASS D

DATE: 83/01/17

ELEV: 6.2 MPH FROM 025 DEG

CURRENT PLUME INFORMATION AS OF 10:45 ON 03/01/17  
ABBREVIATED PROJECTION

ID	MILE	DEG	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN	2.14*SIGMA	CHI/Q
					WHOLE BODY	THYROID	DOSE RATE ID	Y	Z
JULIAN DAY =	19								
11E	1.5	206	9	10:45	9.80E+01	2.89E+02	2.89E+02	TH	159.
11E	5B	206	9	10:45	1.02E+02	3.02E+02	3.02E+02	TH	90.8
10E	3.2	204	9	10:45	1.74E+00	3.11E+00	3.11E+00	TH	297.
9E	4.9	202	9	10:45	8.86E-01	1.59E+00	1.59E+00	TH	435.
8E	6.6	201	9	10:45	5.44E-01	9.83E-01	9.83E-01	TH	567.
7E	8.3	200	9	10:45	3.82E-01	6.96E-01	6.96E-01	TH	695.
6E	10.0	200	9	10:45	2.63E-01	4.82E-01	4.82E-01	TH	820.
5E	11.7	199	9	10:45	1.95E-01	3.61E-01	3.61E-01	TH	942.
4E	13.4	199	9	10:45	1.39E-01	2.59E-01	2.59E-01	TH	1065
3E	15.1	198	9	10:45	9.68E-02	1.81E-01	1.81E-01	TH	1186
2E	16.8	198	9	10:45	6.18E-02	1.16E-01	1.16E-01	TH	1309
1E	18.5	197	9	10:45	4.59E-02	3.01E-02	3.01E-02	TH	1431
1E	20.0	198	9	10:59	1.42E-02	2.70E-02	2.70E-02	TH	1535
1E	30.0	200	9	12:38	7.96E-03	1.51E-02	1.51E-02	TH	2230
1E	40.0	202	9	14:15	5.26E-03	9.98E-03	9.98E-03	TH	2912
1E	50.0	202	9	15:53	3.81E-03	7.23E-03	7.23E-03	TH	3585



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 10:50  
ELEV: 6.2 MPH FROM 025 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 10:45

ROADS AND RAILROADS	STATUS
TOGGLE	
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 11:04

STABILITY CLASS D

DATE: 03/01/19

ELEV: 5.8 MPH FROM 028 DEG

CURRENT PLUME INFORMATION AS OF 11:00 ON 03/01/19

PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CH1/Q

ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JULIAN DAY	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
19											
12G	1.4	209	9	11: 0	5.59E-15	4.44E-13	4.44E-13	TH	151.	56.6	1.43E-05
12G	SB	209	9	11: 0	1.33E-14	1.05E-12	1.05E-12	TH	91.5	0.0	3.42E-05
11G	3.0	207	9	11: 0	1.88E-15	1.49E-13	1.49E-13	TH	274.	85.5	4.94E-06
10G	4.6	205	9	11: 0	9.32E-16	7.40E-14	7.40E-14	TH	397.	109.	2.49E-06
9G	6.3	204	9	11: 0	5.44E-16	4.32E-14	4.32E-14	TH	524.	131.	1.48E-06
8G	8.1	202	9	11: 0	3.71E-16	2.94E-14	2.94E-14	TH	654.	152.	1.03E-06
7G	9.8	202	9	11: 0	2.73E-16	2.17E-14	2.17E-14	TH	782.	170.	7.82E-07
6G	11.4	201	9	11: 0	2.10E-16	1.67E-14	1.67E-14	TH	907.	186.	6.19E-07
5G	13.1	200	9	11: 0	1.68E-16	1.34E-14	1.34E-14	TH	1030	202.	5.09E-07
4G	14.8	200	9	11: 0	1.35E-16	1.07E-14	1.07E-14	TH	1150	216.	4.22E-07
3G	16.5	199	9	11: 0	1.11E-16	8.85E-15	8.85E-15	TH	1270	229.	3.57E-07
2G	18.2	199	9	11: 0	9.23E-17	7.33E-15	7.33E-15	TH	1391	242.	3.06E-07
1G	19.9	198	9	11: 0	7.75E-17	6.15E-15	6.15E-15	TH	1512	255.	2.66E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 11:05  
STABILITY CLASS D

DATE: 83/01/19

LEW 5.8 MPH FROM 028 DEG

CURRENT PLUME INFORMATION AS OF 11:00 ON 83/01/19  
PRESENT LOCATION

ID	MILE	DEC SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN	2.14%SIGMA	CHI/Q		
				WHOLE BODY	THYROID				DOSE RATE ID	Y
JULIAN DAY = 19										
12E	1.4	209	9 11: 0	3.70E+02	1.14E+01	3.70E+02	WB	151.	55.6	5.69E-06
12E	SB	209	9 11: 0	3.59E+02	1.11E+01	3.59E+02	WB	90.8	0.0	5.51E-06
11E	3.0	207	9 11: 0	5.53E+01	1.72E+02	1.72E+02	TH	281.	86.5	3.28E-06
10E	4.6	205	9 11: 0	9.94E-01	1.87E+00	1.87E+00	TH	412.	112.	2.20E-06
9E	6.3	204	9 11: 0	5.38E-01	1.02E+00	1.02E+00	TH	546.	135.	1.23E-06
8E	8.1	202	9 11: 0	3.94E-01	7.54E-01	7.54E-01	TH	675.	154.	9.54E-07
7E	9.8	202	9 11: 0	2.86E-01	5.52E-01	5.52E-01	TH	801.	172.	7.33E-07
6E	11.4	201	9 11: 0	2.05E-01	3.98E-01	3.98E-01	TH	925.	188.	5.69E-07
5E	13.1	200	9 11: 0	1.56E-01	3.05E-01	3.05E-01	TH	1046	203.	4.74E-07
4E	14.8	200	9 11: 0	1.13E-01	2.23E-01	2.23E-01	TH	1168	218.	3.96E-07
3E	16.5	199	9 11: 0	8.01E-02	1.58E-01	1.58E-01	TH	1289	231.	3.37E-07
2E	18.2	199	9 11: 0	5.17E-02	1.03E-01	1.03E-01	TH	1410	244.	2.90E-07
1E	19.9	198	9 11: 0	1.34E-02	2.70E-02	2.70E-02	TH	1532	257.	2.53E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 11:05

STABILITY CLASS D

DATE: 03/01/19

ELEV: 5.8 MPH FROM 028 DEG

CURRENT PLUME INFORMATION AS OF 11:00 ON 03/01/19

ABBREVIATED PROJECTION

ID	MILE	DEC	DEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN 2.14SIGMA		CHI/Q	
					WHOLE BODY	THYROID	DOSE RATE ID	Y	Z	
JULIAN DAY = 19										
12G	1.4	209	9	11: 0	5.59E-15	4.44E-13	4.44E-13	TH 151	56.6	1.43E-05
12C	SB	209	9	11: 0	1.33E-14	1.05E-12	1.05E-12	TH 91.5	0.0	3.42E-05
11G	3.0	207	9	11: 0	1.88E-15	1.49E-13	1.49E-13	TH 274	85.5	4.94E-06
10C	4.6	205	9	11: 0	9.32E-16	7.40E-14	7.40E-14	TH 397	109.	2.49E-06
9G	6.3	204	9	11: 0	5.44E-16	4.32E-14	4.32E-14	TH 524	131.	1.48E-06
8C	8.1	202	9	11: 0	3.71E-16	2.94E-14	2.94E-14	TH 654	152.	1.03E-06
7G	9.8	202	9	11: 0	2.73E-16	2.17E-14	2.17E-14	TH 782	170.	7.82E-07
6G	11.4	201	9	11: 0	2.10E-16	1.67E-14	1.67E-14	TH 907	186.	6.19E-07
5G	13.1	200	9	11: 0	1.68E-16	1.34E-14	1.34E-14	TH 1030	202.	5.09E-07
4C	14.8	200	9	11: 0	1.35E-16	1.07E-14	1.07E-14	TH 1150	216.	4.22E-07
3G	16.5	199	9	11: 0	1.11E-16	8.85E-15	8.85E-15	TH 1270	229.	3.57E-07
2C	18.2	199	9	11: 0	9.23E-17	7.33E-15	7.33E-15	TH 1391	242.	3.06E-07
1G	19.9	198	9	11: 0	7.75E-17	6.15E-15	6.15E-15	TH 1512	255.	2.66E-07
1C	20.0	198	9	11: 1	7.72E-17	6.13E-15	6.13E-15	TH 1515	0.0	2.65E-07
1G	30.0	202	9	12:46	4.22E-17	3.35E-15	3.35E-15	TH 2215	0.0	1.45E-07
1C	40.0	202	9	14:30	2.77E-17	2.20E-15	2.20E-15	TH 2898	0.0	9.52E-08
1G	50.0	205	9	16:15	1.99E-17	1.58E-15	1.58E-15	TH 3574	0.0	6.86E-08

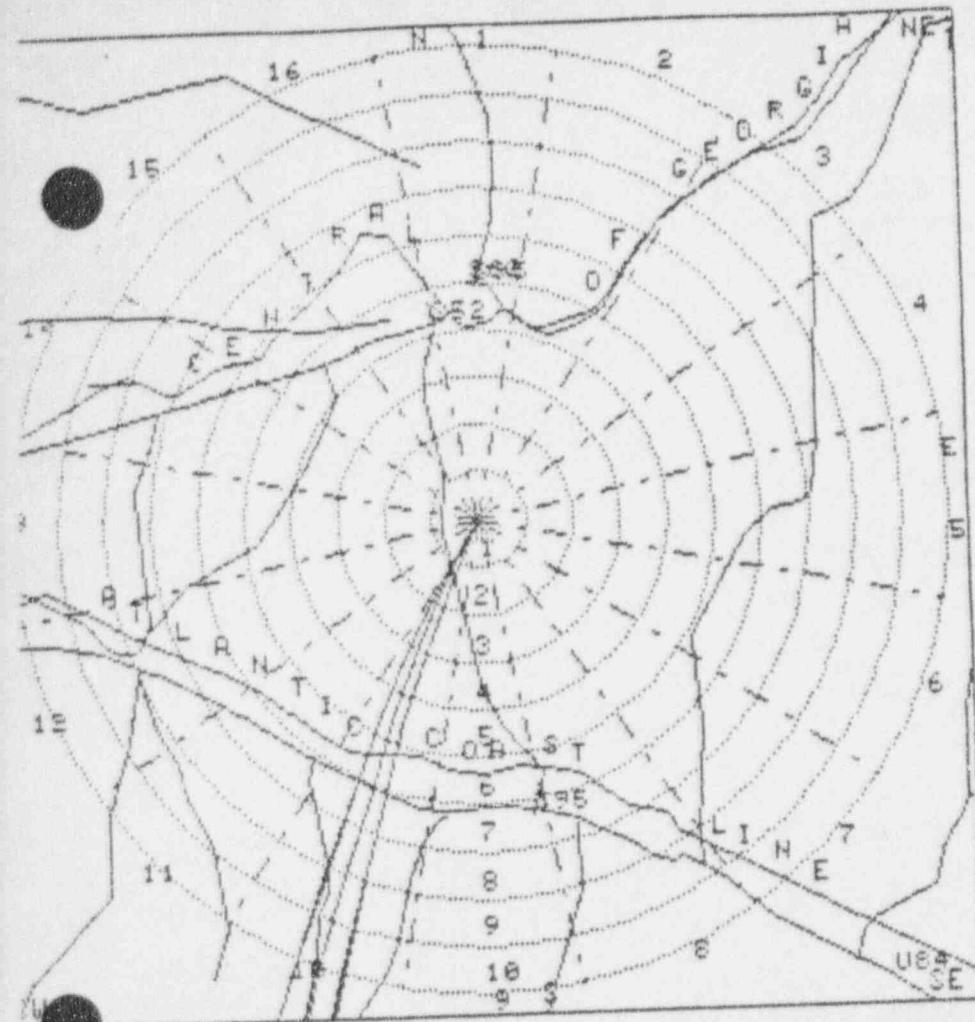
ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 11:05  
STABILITY CLASS D

DATE: 83/01/19

SLEW 5.8 MPH FROM 020 DEG

CURRENT PLUME INFORMATION AS OF 11:00 ON 83/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z  
ID MILE DEG SEC TIME WHOLE BODY THYROID

JULIAN DAY =		19											
ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z	WB	TH	WB	TH
12E	1.4	209	9	11: 0	3.70E+02	1.14E+01	3.70E+02	151.	55.6	5.69E-06	90.8	0.0	5.51E-06
12E	SB	209	9	11: 0	3.59E+02	1.11E+01	3.59E+02	281.	86.5	3.28E-06			
11E	3.0	207	9	11: 0	5.53E+01	1.72E+02	1.72E+02	412.	112.	2.20E-06			
10E	4.6	205	9	11: 0	9.94E-01	1.87E+00	1.87E+00	546.	135.	1.23E-06			
9E	6.3	204	9	11: 0	5.38E-01	1.02E+00	1.02E+00	675.	154.	9.54E-07			
8E	8.1	202	9	11: 0	3.94E-01	7.54E-01	7.54E-01	801.	172.	7.33E-07			
7E	9.8	202	9	11: 0	2.86E-01	5.52E-01	5.52E-01	925.	188.	5.69E-07			
6E	11.4	201	9	11: 0	2.05E-01	3.98E-01	3.98E-01	1046	203.	4.74E-07			
5E	13.1	200	9	11: 0	1.56E-01	3.05E-01	3.05E-01	1168	218.	3.96E-07			
4E	14.8	200	9	11: 0	1.13E-01	2.23E-01	2.23E-01	1289	231.	3.37E-07			
3E	16.5	199	9	11: 0	8.01E-02	1.58E-01	1.58E-01	1410	244.	2.90E-07			
2E	18.2	199	9	11: 0	5.17E-02	1.03E-01	1.03E-01	1532	257.	2.53E-07			
1E	19.9	198	9	11: 0	3.34E-02	2.70E-02	2.70E-02	1536	0.0	2.52E-07			
1E	20.0	198	9	11: 1	3.34E-02	2.69E-02	2.69E-02	2235	0.0	1.40E-07			
1E	30.0	202	9	12:46	7.48E-03	1.49E-02	1.49E-02	2910	0.0	9.29E-08			
1E	40.0	203	9	14:30	4.94E-03	9.90E-03	9.90E-03	3593	0.0	6.74E-08			
1E	50.0	205	9	16:15	3.58E-03	7.18E-03	7.18E-03						



ACTUAL INCIDENT  
 FARLEY NUCLEAR PLANT  
 DATE: 83/01/14 -DAY- TIME: 1:054  
 ELEV: 5.8 MPH FROM 028 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 11:00

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

JINTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 11:15

STABILITY CLASS D

DATE: 03/01/89

ELEV: 5.4 MPH FROM 032 DEG

CURRENT PLUME INFORMATION AS OF 11:15 ON 03/01/19

PRESENT LOCATION

ID	MILE	DEC	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN	2.14*SIGMA	CHI/Q
					WHOLE BODY	THYROID			
JULIAN DAY =	19								
13G	1.3	212	9	11:15	6.49E-15	5.37E-13	5.37E-13	TH	142.
13G	SB	212	9	11:15	1.39E-14	1.15E-12	1.15E-12	TH	91.5
12G	2.8	210	9	11:15	2.17E-15	1.80E-13	1.80E-13	TH	257.
11G	4.3	209	9	11:15	1.07E-15	8.86E-14	8.86E-14	TH	373.
10G	5.9	207	9	11:15	6.20E-16	5.14E-14	5.14E-14	TH	493.
9G	7.7	205	9	11:15	3.96E-16	3.28E-14	3.28E-14	TH	747.
8G	9.4	204	9	11:15	2.85E-16	2.36E-14	2.36E-14	TH	873.
7G	11.1	203	9	11:15	2.18E-16	1.80E-14	1.80E-14	TH	997.
6G	12.8	202	9	11:15	1.72E-16	1.43E-14	1.43E-14	TH	1119
5G	14.4	201	9	11:15	1.41E-16	1.16E-14	1.16E-14	TH	1238
4G	16.1	201	9	11:15	1.15E-16	9.53E-15	9.53E-15	TH	1358
3G	17.8	200	9	11:15	9.56E-17	7.91E-15	7.91E-15	TH	1478
2G	19.5	200	9	11:15	8.00E-17	6.62E-15	6.62E-15	TH	1598
1G	21.2	199	9	11:15	6.77E-17	5.60E-15	5.60E-15	TH	1598

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 11:18

STABILITY CLASS D

DATE: 83/01/19

LEV: 5.4 MPH FROM 032 DEG

CURRENT PLUME INFORMATION AS OF 11:15 ON 83/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
TULIAN DAY =	19										
13E	1.3	212	9	11:15	5.06E+02	1.63E+01	5.06E+02	WB	142.	53.2	5.81E-06
13E	58	212	9	11:15	4.53E+02	1.46E+01	4.53E+02	WB	90.8	0.0	5.20E-06
12E	2.8	210	9	11:15	2.24E+02	7.34E+00	2.24E+02	WB	265.	83.0	3.66E-06
11E	4.3	209	9	11:15	4.08E+01	1.34E+02	1.34E+02	TH	389.	107.	2.57E-06
10E	5.9	207	9	11:15	6.14E-01	1.22E+00	1.22E+00	TH	516.	130.	1.44E-06
9E	7.7	205	9	11:15	4.01E-01	8.05E-01	8.05E-01	TH	647.	150.	9.77E-07
8E	9.4	204	9	11:15	2.98E-01	6.03E-01	6.03E-01	TH	775.	169.	7.66E-07
7E	11.1	203	9	11:15	2.17E-01	4.43E-01	4.43E-01	TH	899.	185.	5.90E-07
6E	12.8	202	9	11:15	1.66E-01	3.40E-01	3.40E-01	TH	1022	201.	4.87E-07
5E	14.4	201	9	11:15	1.28E-01	2.65E-01	2.65E-01	TH	1143	215.	4.13E-07
4E	16.1	201	9	11:15	9.49E-02	1.97E-01	1.97E-01	TH	1263	228.	3.50E-07
3E	17.8	200	9	11:15	6.76E-02	1.41E-01	1.41E-01	TH	1384	241.	3.01E-07
2E	19.5	200	9	11:15	4.41E-02	9.28E-02	9.28E-02	TH	1504	254.	2.62E-07
1E	21.2	199	9	11:15	1.14E-02	2.41E-02	2.41E-02	TH	1626	266.	2.28E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 11:15  
STABILITY CLASS D

DATE: 83/01/19

LEV: 5.4 MPH FROM 032 DEG

CURRENT PLUME INFORMATION AS OF 11:15 ON 83/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY = 19										
13G	1.3	212	9	11:15	6.49E-15	5.37E-13	TH	142.	54.2	1.71E-05
13G	SB	212	9	11:15	1.39E-14	1.15E-12	TH	91.5	0.0	3.67E-05
12G	2.8	210	9	11:15	2.17E-15	1.80E-13	TH	257.	81.9	5.84E-06
11G	4.3	207	9	11:15	1.07E-15	8.86E-14	TH	373.	105.	2.93E-06
10G	5.9	207	9	11:15	6.20E-16	5.14E-14	TH	493.	126.	1.73E-06
9G	7.7	205	9	11:15	3.96E-16	3.28E-14	TH	618.	146.	1.13E-06
8G	9.4	204	9	11:15	2.85E-16	2.36E-14	TH	747.	165.	8.36E-07
7G	11.1	203	9	11:15	2.18E-16	1.80E-14	TH	873.	182.	6.54E-07
6G	12.8	202	9	11:15	1.72E-16	1.43E-14	TH	997.	198.	5.31E-07
5G	14.4	201	9	11:15	1.41E-16	1.16E-14	TH	1119	212.	4.46E-07
4G	16.1	201	9	11:15	1.15E-16	9.53E-15	TH	1238	226.	3.75E-07
3G	17.8	200	9	11:15	9.56E-17	7.91E-15	TH	1358	239.	3.21E-07
2G	19.5	200	9	11:15	8.00E-17	6.62E-15	TH	1478	251.	2.77E-07
1G	21.2	199	9	11:15	6.77E-17	5.60E-15	TH	1598	263.	2.43E-07
1G	30.0	203	9	12:55	4.04E-17	3.34E-15	TH	2213	0.0	1.45E-07
1G	40.0	205	9	14:47	2.64E-17	2.19E-15	TH	2900	0.0	9.51E-08
1G	50.0	207	9	16:40	1.90E-17	1.57E-15	TH	3577	0.0	6.86E-08

DATE: 03/01/19  
ELEV: 5.4 MPH FROM 032 DEG

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

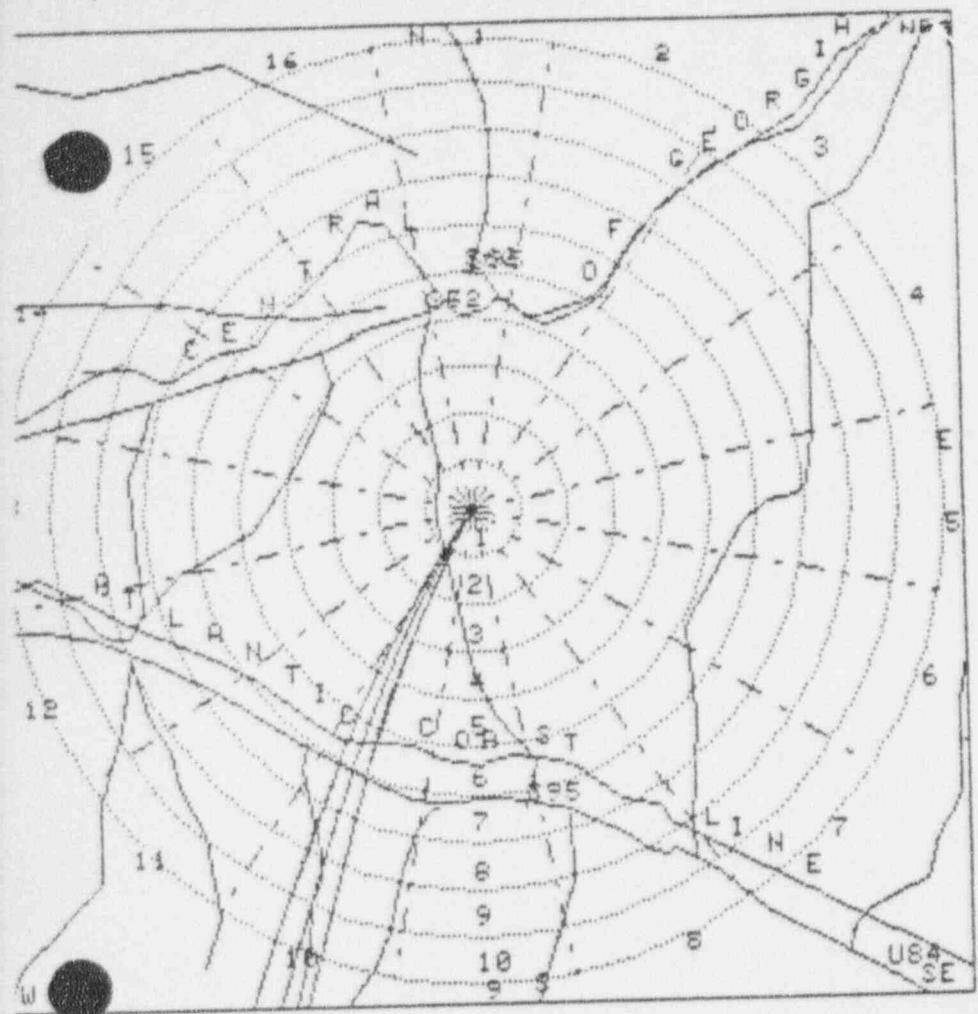
TIME: 11:18  
STABILITY CLASS D

CURRENT PLUME INFORMATION AS OF 11:15 ON 03/01/19  
ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/C  
ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JULIAN DAY = 19

13E	1.3	212	9	11:15	5.06E+02	1.63E+01	5.06E+02	WB	142.	53.2	5.81E-06
13E	SB	212	9	11:15	4.53E+02	1.46E+01	4.53E+02	WB	90.8	0.0	5.20E-06
12E	2.8	210	9	11:15	2.24E+02	7.34E+00	2.24E+02	WB	265.	83.0	3.66E-06
11E	4.3	209	9	11:15	4.08E+01	1.34E+02	1.34E+02	TH	389.	107.	2.57E-06
10E	5.9	207	9	11:15	6.14E-01	1.22E+00	1.22E+00	TH	516.	130.	1.44E-06
9E	7.7	205	9	11:15	4.01E-01	8.05E-01	8.05E-01	TH	647.	159.	9.77E-07
8E	9.4	204	9	11:15	2.98E-01	6.03E-01	6.03E-01	TH	775.	169.	7.66E-07
7E	11.1	203	9	11:15	2.17E-01	4.43E-01	4.43E-01	TH	899.	185.	5.90E-07
6E	12.8	202	9	11:15	1.66E-01	3.40E-01	3.40E-01	TH	1022	201.	4.87E-07
5E	14.4	201	9	11:15	1.28E-01	2.65E-01	2.65E-01	TH	1143	215.	4.13E-07
4E	16.1	201	9	11:15	9.49E-02	1.97E-01	1.97E-01	TH	1263	228.	3.50E-07
3E	17.8	200	9	11:15	6.76E-02	1.41E-01	1.41E-01	TH	1384	241.	3.01E-07
2E	19.5	200	9	11:15	4.41E-02	9.28E-02	9.28E-02	TH	1504	254.	2.62E-07
1E	21.2	199	9	11:15	1.14E-02	2.41E-02	2.41E-02	TH	1626	266.	2.28E-07
1E	30.0	203	9	12:55	6.95E-03	1.47E-02	1.47E-02	TH	2240	0.0	1.38E-07
1E	40.0	205	9	14:47	4.60E-03	9.75E-03	9.75E-03	TH	2926	0.0	9.19E-08
1E	50.0	207	9	16:40	3.34E-03	7.08E-03	7.08E-03	TH	3603	0.0	6.67E-08



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 11:20  
ELEV: 5.4 MPH FROM 032 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 11:15

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 11:33

STABILITY CLASS D

DATE: 03/01/19

ELEV: 5.5 MPH FROM 027 DEG

CURRENT PLUME INFORMATION AS OF 11:30 ON 03/01/19  
PRESENT LOCATION

ID	MILE	DEG	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN	2.14SIGMA	CHI/Q		
					WHOLE BODY	THYROID			DOSE RATE ID	Y	Z
JULIAN DAY = 19											
14G	1.4	208	9	11:30	6.00E-15	5.18E-13	5.18E-13	TH	145.	51.9	1.63E-05
14G	5B	208	9	11:30	1.32E-14	1.14E-12	1.14E-12	TH	91.5	0.0	3.60E-05
19G	4.1	211	9	11:30	2.21E-15	1.90E-13	1.90E-13	TH	262.	82.9	6.10E-06
12G	5.5	210	9	11:30	7.47E-16	6.44E-14	6.44E-14	TH	475.	123.	2.10E-06
11G	7.0	209	9	11:30	4.87E-16	4.20E-14	4.20E-14	TH	585.	141.	1.39E-06
10G	8.7	208	9	11:30	3.34E-16	2.88E-14	2.88E-14	TH	700.	158.	9.77E-07
9G	10.4	206	9	11:30	2.38E-16	2.05E-14	2.05E-14	TH	821.	175.	7.12E-07
8G	12.1	205	9	11:30	1.85E-16	1.60E-14	1.60E-14	TH	947.	192.	5.60E-07
7G	13.8	204	9	11:30	1.50E-16	1.29E-14	1.29E-14	TH	1071	207.	4.70E-07
6G	15.5	203	9	11:30	1.23E-16	1.06E-14	1.06E-14	TH	1193	221.	3.98E-07
5G	17.1	203	9	11:30	1.04E-16	8.98E-15	8.98E-15	TH	1313	234.	3.44E-07
4G	18.8	202	9	11:30	8.72E-17	7.52E-15	7.52E-15	TH	1432	247.	2.97E-07
3G	20.5	201	9	11:30	7.39E-17	6.38E-15	6.38E-15	TH	1550	259.	2.60E-07
2G	22.2	201	9	11:30	6.30E-17	5.43E-15	5.43E-15	TH	1669	270.	2.28E-07
1G	23.9	200	9	11:30	5.41E-17	4.67E-15	4.67E-15	TH	1789	281.	2.03E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/19  
ELEV: 5.5 MPH FROM 027 DEG

TIME: 11:34

STABILITY CLASS D

CURRENT PLUME INFORMATION AS OF 11:30 ON 83/01/19  
PRESENT LOCATION

ID	MILE	DEC	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN	2.14*SIGMA	CHI/Q
					WHOLE BODY	THYROID			

JULIAN DAY = 19											
14E	1.4	208	9	11:30	5.45E+02	1.84E+01	5.45E+02	WB	144.	53.8	5.80E-06
14E	SB	208	9	11:30	4.98E+02	1.68E+01	4.98E+02	WB	90.8	0.0	5.30E-06
13E	4.1	211	9	11:30	2.64E+02	9.02E+00	2.64E+02	WB	368.	103.	3.22E-06
12E	5.5	210	9	11:30	1.05E+02	3.65E+00	1.05E+02	WB	480.	124.	1.62E-06
11E	7.0	209	9	11:30	1.86E+01	6.49E+01	6.49E+01	TH	597.	143.	1.24E-06
10E	8.7	208	9	11:30	3.51E-01	7.39E-01	7.39E-01	TH	720.	161.	8.76E-07
9E	10.4	206	9	11:30	2.38E-01	5.04E-01	5.04E-01	TH	847.	178.	6.13E-07
8E	12.1	205	9	11:30	1.90E-01	4.06E-01	4.06E-01	TH	972.	194.	5.18E-07
7E	13.8	204	9	11:30	1.51E-01	3.25E-01	3.25E-01	TH	1095	209.	4.34E-07
6E	15.5	203	9	11:30	1.19E-01	2.58E-01	2.58E-01	TH	1216	223.	3.71E-07
5E	17.1	203	9	11:30	9.52E-02	2.07E-01	2.07E-01	TH	1335	236.	3.24E-07
4E	18.8	202	9	11:30	7.18E-02	1.57E-01	1.57E-01	TH	1454	249.	2.81E-07
3E	20.5	201	9	11:30	5.14E-02	1.13E-01	1.13E-01	TH	1574	261.	2.43E-07
2E	22.2	201	?	11:30	3.41E-02	7.58E-02	7.58E-02	TH	1694	272.	2.15E-07
1E	23.9	200	9	11:30	9.09E-03	2.03E-02	2.03E-02	TH	1814	284.	1.92E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 11:34  
STABILITY CLASS D

ATE: 03/01/19

LEV: 5.5 MPH FROM 027 DEG

CURRENT PLUME INFORMATION AS OF 11:30 ON 03/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HRY) HIGH DOSE ORGAN 2.14SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY = 19										
14G	1.4	208	9 11:30	6.00E-15	5.10E-13	5.10E-13	TH	145.	54.9	1.63E-05
14C	SB	208	9 11:30	1.32E-14	1.14E-12	1.14E-12	TH	91.5	0.0	3.60E-05
13G	4.1	211	9 11:30	2.21E-15	1.90E-13	1.90E-13	TH	262.	82.9	6.10E-06
12G	5.5	210	9 11:30	7.47E-16	6.44E-14	6.44E-14	TH	175.	123.	2.10E-06
11G	7.0	209	9 11:30	4.87E-16	4.20E-14	4.20E-14	TH	585.	141.	1.39E-06
10G	8.7	208	9 11:30	3.34E-16	2.88E-14	2.88E-14	TH	700.	158.	9.77E-07
9G	10.4	206	9 11:30	2.38E-16	2.05E-14	2.05E-14	TH	821.	175.	7.12E-07
8G	12.1	205	9 11:30	1.85E-16	1.60E-14	1.60E-14	TH	947.	192.	5.68E-07
7G	13.8	204	9 11:30	1.50E-16	1.29E-14	1.29E-14	TH	1071	209.	4.70E-07
6G	15.5	203	9 11:30	1.23E-16	1.06E-14	1.06E-14	TH	1193	221.	3.98E-07
5G	17.1	203	9 11:30	1.04E-16	8.98E-15	8.98E-15	TH	1313	234.	3.44E-07
4G	18.8	202	9 11:30	9.72E-17	7.52E-15	7.52E-15	TH	1432	247.	2.97E-07
3G	20.5	201	9 11:30	7.39E-17	6.38E-15	6.38E-15	TH	1550	259.	2.60E-07
2G	22.2	201	9 11:30	6.30E-17	5.43E-15	5.43E-15	TH	1669	270.	2.28E-07
1G	23.9	200	9 11:30	5.41E-17	4.67E-15	4.67E-15	TH	1789	281.	2.03E-07
1G	30.0	202	9 12:37	3.87E-17	3.34E-15	3.34E-15	TH	2210	0.0	1.45E-07
1G	40.0	203	9 14:27	2.53E-17	2.18E-15	2.18E-15	TH	2693	0.0	9.54E-08
1G	50.0	204	9 16:17	1.83E-17	1.57E-15	1.57E-15	TH	3568	0.0	6.88E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 11:34

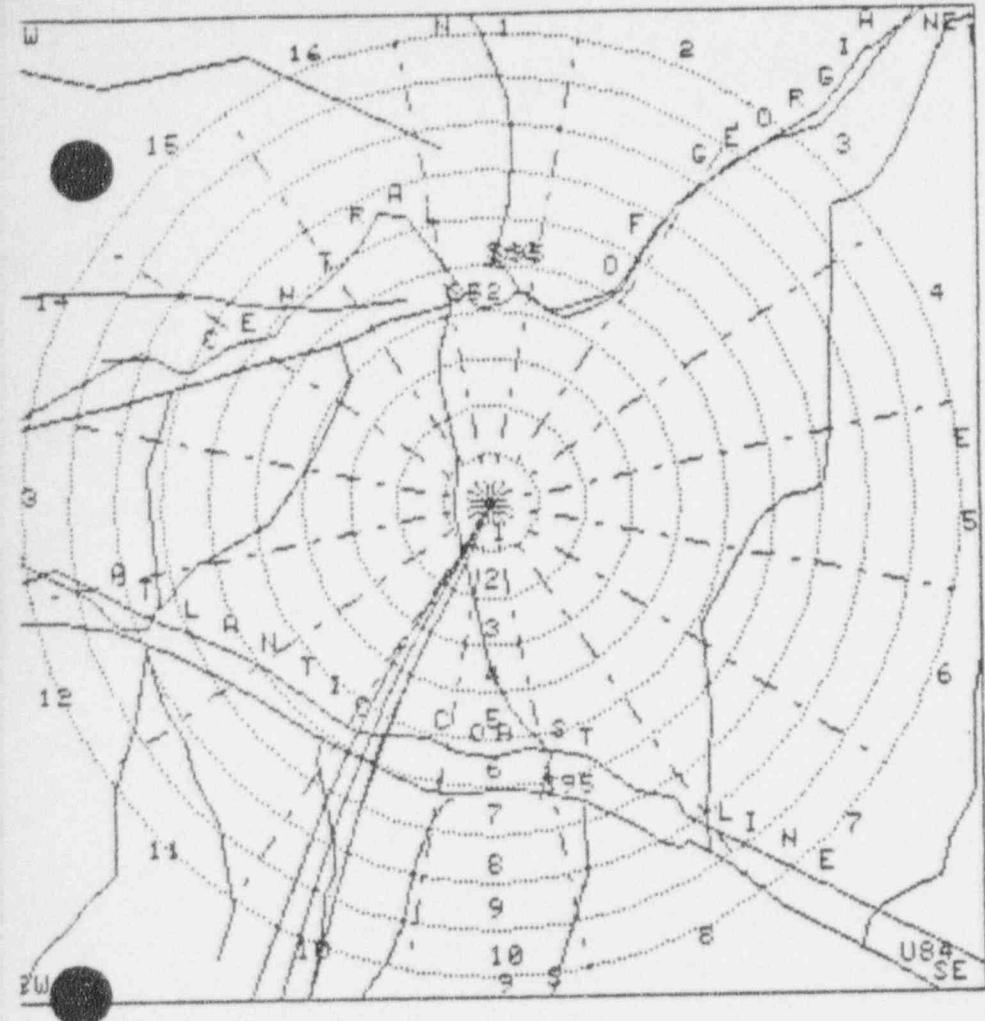
STABILITY CLASS D

DATE: 83/01/19

ELEV: 5.5 MPH FROM 027 DEG

CURRENT PLUME INFORMATION AS OF 11:30 ON 83/01/19  
ABBREVIATED PROJECTION

ID	MILE	DEC	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN 2.14*SIGMA		CHI/Q		
					WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY =	19										
14E	1.4	208	9	11:30	5.45E+02	1.84E+01	5.45E+02	WB	144.	53.8	5.80E-06
14E	5B	208	9	11:30	4.98E+02	1.68E+01	4.98E+02	WB	90.0	0.0	5.30E-06
13E	4.1	211	9	11:30	2.64E+02	9.02E+00	2.64E+02	WB	368.	103.	3.22E-06
12E	5.5	210	9	11:30	1.05E+02	3.65E+00	1.05E+02	WB	480.	124.	1.82E-06
11E	7.0	209	9	11:30	1.86E+01	6.49E+01	6.49E+01	TH	597.	143.	1.24E-06
10E	8.7	208	9	11:30	3.51E-01	7.39E-01	7.39E-01	TH	720.	161.	8.76E-07
9E	10.4	206	9	11:30	2.38E-01	5.04E-01	5.04E-01	TH	847.	178.	6.13E-07
8E	12.1	205	9	11:30	1.90E-01	4.06E-01	4.06E-01	TH	972.	194.	5.18E-07
7E	13.8	204	9	11:30	1.51E-01	3.25E-01	3.25E-01	TH	1095.	209.	4.34E-07
6E	15.5	203	9	11:30	1.19E-01	2.58E-01	2.58E-01	TH	1216.	223.	3.71E-07
5E	17.1	203	9	11:30	9.52E-02	2.07E-01	2.07E-01	TH	1335.	236.	3.24E-07
4E	18.8	202	9	11:30	7.18E-02	1.57E-01	1.57E-01	TH	1454.	249.	2.81E-07
3E	20.5	201	9	11:30	5.14E-02	1.13E-01	1.13E-01	TH	1574.	261.	2.43E-07
2E	22.2	201	9	11:30	3.41E-02	7.58E-02	7.58E-02	TH	1694.	272.	2.15E-07
1E	23.9	200	9	11:30	9.09E-03	2.03E-02	2.03E-02	TH	1814.	284.	1.92E-07
1E	30.0	202	9	12:37	6.58E-03	1.47E-02	1.47E-02	TH	2235.	0.0	1.39E-07
1E	40.0	203	9	14:27	4.36E-03	9.76E-03	9.76E-03	TH	2918.	0.0	9.23E-08
1E	50.0	204	9	16:17	3.17E-03	7.08E-03	7.08E-03	TH	3592.	0.0	6.70E-08



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 11:35  
ELEV: 5.5 MPH FROM 027 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 11:30

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 11:49

STABILITY CLASS D

DATE: 03/01/19

ELEV: 5.6 MPH FROM 023 DEG

CURRENT PLUME INFORMATION AS OF 11:45 ON 03/01/19  
PRESENT LOCATION

ID	MILE	DEC	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN 2.14%SIGMA		CHI/Q	
					WHOLE BODY	THYROID	DOSE RATE ID	Y	Z	
JULIAN DAY = 19										
150	1.4	204	9	11:45	5.56E-15	4.99E-13	4.99E-13	TH 147.	55.6	1.55E-05
150	SR	204	9	11:45	1.26E-14	1.13E-12	1.13E-12	TH 91.5	0.0	3.53E-05
140	2.8	206	9	11:45	2.05E-15	1.83E-13	1.83E-13	TH 266.	83.9	5.80E-06
130	5.4	209	9	11:45	1.15E-15	1.03E-13	1.03E-13	TH 377.	106.	3.31E-06
120	6.9	209	9	11:45	5.09E-16	4.56E-14	4.56E-14	TH 583.	141.	1.49E-06
110	8.4	208	9	11:45	3.54E-16	3.18E-14	3.18E-14	TH 691.	157.	1.06E-06
100	10.0	207	9	11:45	2.54E-16	2.28E-14	2.28E-14	TH 805.	173.	7.77E-07
90	11.8	206	9	11:45	1.87E-16	1.68E-14	1.68E-14	TH 925.	189.	5.86E-07
80	13.5	205	9	11:45	1.50E-16	1.35E-14	1.35E-14	TH 1050	204.	4.81E-07
70	15.2	204	9	11:45	1.24E-16	1.11E-14	1.11E-14	TH 1173	219.	4.06E-07
60	16.9	203	9	11:45	1.03E-16	9.32E-15	9.32E-15	TH 1294	232.	3.49E-07
50	18.5	203	9	11:45	8.86E-17	7.95E-15	7.95E-15	TH 1414	245.	3.06E-07
40	20.2	202	9	11:45	7.50E-17	6.73E-15	6.73E-15	TH 1532	257.	2.66E-07
30	21.9	202	9	11:45	6.41E-17	5.75E-15	5.75E-15	TH 1650	269.	2.35E-07
20	23.6	201	9	11:45	5.50E-17	4.93E-15	4.93E-15	TH 1768	280.	2.08E-07
10	25.3	200	9	11:45	4.75E-17	4.27E-15	4.27E-15	TH 1887	290.	1.87E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 11:49

DATE: 03/01/19

STABILITY CLASS D

ELEV: 5.6 MPH FROM 023 DEG

CURRENT PLUME INFORMATION AS OF 11:45 ON 03/01/19

PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q

ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JULIAN DAY	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
15	1.4	204	9	11:45	5.43E+02	1.91E+01	5.43E+02	WB	147.	54.5	5.77E-06
16	SB	204	9	11:45	5.07E+02	1.78E+01	5.07E+02	WB	90.8	0.0	5.38E-06
14	2.8	206	9	11:45	3.37E+02	1.20E+01	3.37E+02	WB	264.	82.7	3.80E-06
13	5.1	209	9	11:45	1.53E+02	5.53E+00	1.53E+02	WB	477.	123.	1.98E-06
12	6.9	209	9	11:45	7.27E+01	2.65E+00	7.27E+01	WB	587.	141.	1.33E-06
11	8.4	200	9	11:45	1.37E+01	5.03E+01	5.03E+01	TH	702.	158.	9.70E-07
10	10.0	207	9	11:45	2.52E-01	5.70E-01	5.70E-01	TH	823.	175.	6.78E-07
9	11.8	206	9	11:45	1.89E-01	4.23E-01	4.23E-01	TH	949.	192.	5.17E-07
8	13.5	205	9	11:45	1.54E-01	3.47E-01	3.47E-01	TH	1073	207.	4.44E-07
7	15.2	204	9	11:45	1.24E-01	2.82E-01	2.82E-01	TH	1195	221.	3.79E-07
6	16.8	203	9	11:45	9.97E-02	2.27E-01	2.27E-01	TH	1315	234.	3.28E-07
5	18.5	203	9	11:45	8.04E-02	1.84E-01	1.84E-01	TH	1433	246.	2.90E-07
4	20.2	202	9	11:45	6.04E-02	1.39E-01	1.39E-01	TH	1552	259.	2.50E-07
3	21.9	202	9	11:45	4.42E-02	1.03E-01	1.03E-01	TH	1671	270.	2.21E-07
2	23.6	201	9	11:45	2.95E-02	6.93E-02	6.93E-02	TH	1791	281.	1.97E-07
1	25.3	200	9	11:45	7.92E-03	1.86E-02	1.86E-02	TH	1911	292.	1.77E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 11:50  
STABILITY CLASS D

DATE: 03/01/19

LEV: 5.6 MPH FROM 023 DEG

CURRENT PLUME INFORMATION AS OF 11:45 ON 03/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.11%SIGMA CHI/R  
DOSE RATE ID Y Z

ID	MILE	DEC SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z
JULIAN DAY = 19									
1S0	1.4	204	9 11:45	5.56E-15	4.99E-13	4.99E-13	TH 147	55.6	1.55E-05
1S0	5.8	204	9 11:45	1.26E-14	1.13E-12	1.13E-12	TH 91.5	0.0	3.53E-05
1H0	2.8	206	9 11:45	2.05E-15	1.83E-13	1.83E-13	TH 266	83.9	5.80E-06
1S0	5.4	209	9 11:45	1.15E-15	1.03E-13	1.03E-13	TH 377	106	3.31E-06
1Z0	6.9	209	9 11:45	5.09E-16	4.56E-14	4.56E-14	TH 583	141	1.49E-06
1D0	8.4	208	9 11:45	3.54E-16	3.18E-14	3.18E-14	TH 805	173	7.77E-07
1H0	10.0	207	9 11:45	2.54E-16	2.28E-14	2.28E-14	TH 925	189	5.86E-07
9G	11.8	206	9 11:45	1.87E-16	1.68E-14	1.68E-14	TH 1050	204	4.81E-07
8G	13.5	205	9 11:45	1.50E-16	1.35E-14	1.35E-14	TH 1173	219	4.06E-07
7G	15.2	204	9 11:45	1.24E-16	1.11E-14	1.11E-14	TH 1294	232	3.49E-07
6G	16.8	203	9 11:45	1.03E-16	9.32E-15	9.32E-15	TH 1414	245	3.06E-07
5G	18.5	203	9 11:45	8.86E-17	7.95E-15	7.95E-15	TH 1532	257	2.66E-07
4G	20.2	202	9 11:45	7.50E-17	6.73E-15	6.73E-15	TH 1650	268	2.35E-07
3G	21.9	202	9 11:45	6.41E-17	5.75E-15	5.75E-15	TH 1768	280	2.08E-07
2G	23.6	201	9 11:45	5.50E-17	4.93E-15	4.93E-15	TH 1887	290	1.87E-07
1C	25.3	200	9 11:45	4.75E-17	4.27E-15	4.27E-15	TH 2209	0.0	1.45E-07
1G	30.0	201	9 12:35	3.71E-17	3.33E-15	3.33E-15	TH 2390	0.0	9.56E-08
1G	40.0	202	9 14:23	2.43E-17	2.18E-15	2.18E-15	TH 3562	0.0	6.90E-08
C	50.0	202	9 16:10	1.75E-17	1.57E-15	1.57E-15			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 11:50  
STABILITY CLASS D

ATE: 83/01/19

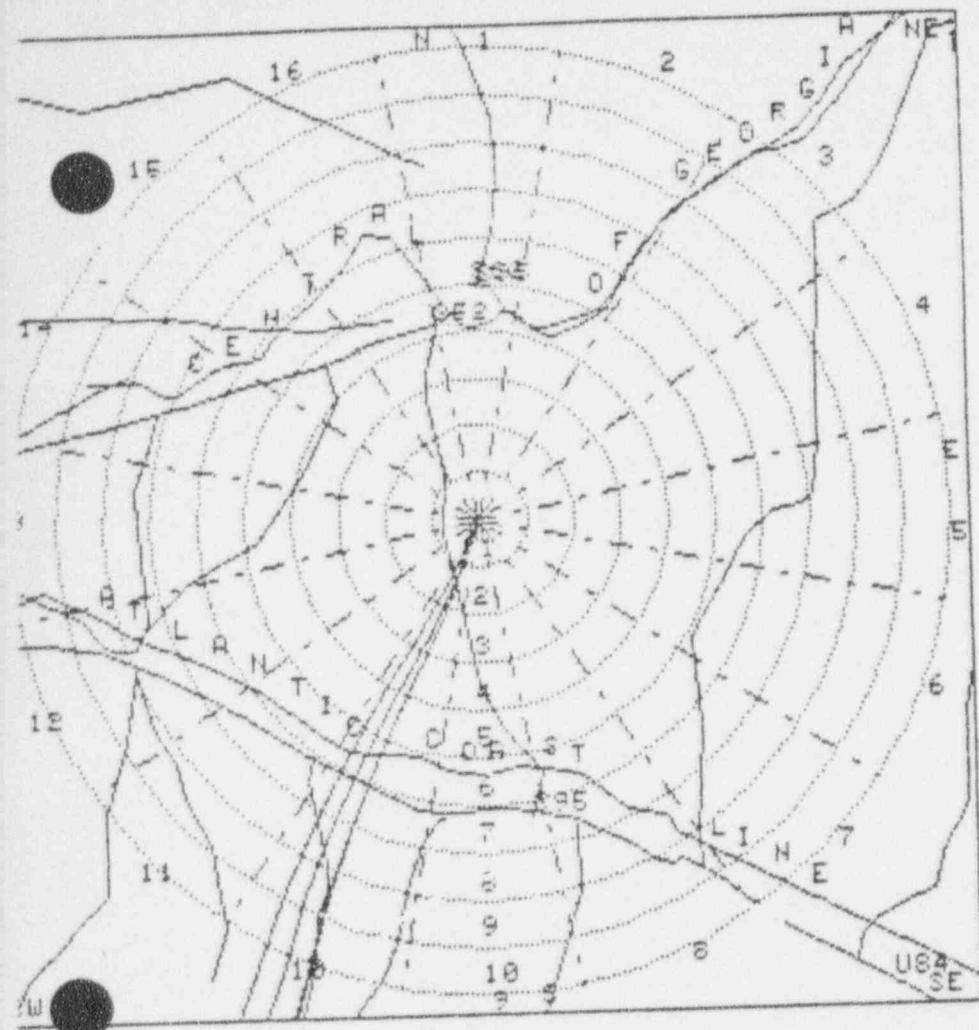
LEV: 5.6 MPH FROM 023 DEG

CURRENT PLUME INFORMATION AS OF 11:45 ON 83/01/19

ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z  
ID MILE DEC SEC TIME WHOLE BODY THYROID DOSE RATE

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z		
1	1.4	204	9	11:45	5.43E+02	1.91E+01	5.43E+02	WB	147.	54.5	5.77E-06	
2	SB	204	9	11:45	5.07E+02	1.78E+01	5.07E+02	WB	90.8	0.0	5.38E-06	
3	15E	206	9	11:45	3.37E+02	1.20E+01	3.37E+02	WB	264.	82.7	3.80E-06	
4	19E	206	9	11:45	1.53E+02	5.53E+00	1.53E+02	WB	477.	123.	1.98E-06	
5	13E	209	9	11:45	7.22E+01	2.65E+00	7.27E+01	WB	587.	141.	1.33E-06	
6	12E	209	9	11:45	1.37E+01	5.03E+01	5.03E+01	TH	702.	158.	9.70E-07	
7	11E	208	9	11:45	2.57E-01	5.70E-01	5.70E-01	TH	823.	175.	6.78E-07	
8	10E	207	9	11:45	1.23E-01	1.23E-01	1.23E-01	TH	949.	192.	5.17E-07	
9	9E	208	9	11:45	1.89E-01	3.47E-01	3.47E-01	TH	1073	207.	4.44E-07	
10	8E	205	9	11:45	1.54E-01	2.82E-01	2.82E-01	TH	1195	221.	3.79E-07	
11	7E	15.2	204	9	11:45	1.24E-01	2.27E-01	2.27E-01	TH	1315	234.	3.28E-07
12	6E	16.8	203	9	11:45	9.97E-02	1.84E-01	1.84E-01	TH	1433	246.	2.90E-07
13	5E	18.5	203	9	11:45	8.04E-02	1.39E-01	1.39E-01	TH	1552	259.	2.50E-07
14	4E	20.2	202	9	11:45	6.04E-02	1.03E-01	1.03E-01	TH	1671	270.	2.21E-07
15	3E	21.9	202	9	11:45	4.42E-02	6.93E-02	6.93E-02	TH	1791	281.	1.97E-07
16	2E	23.6	201	9	11:45	2.95E-02	1.86E-02	1.86E-02	TH	1911	292.	1.77E-07
17	1E	25.3	200	9	11:45	7.92E-03	1.46E-02	1.46E-02	TH	2232	0.0	1.39E-07
18	1E	30.0	201	9	12:35	6.23E-03	9.74E-03	9.74E-03	TH	2912	0.0	9.26E-08
19	1E	40.0	202	9	14:23	4.13E-03	7.08E-03	7.08E-03	TH	3585	0.0	6.72E-08
20	1E	50.0	202	9	16:10	3.00E-03						



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 11:50  
ELEV: 5.6 MPH FROM 023 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 11:45

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:03

STABILITY CLASS D

ATE: 83/01/19

LEV: 5.7 MPH FROM 019 DEG

CURRENT PLUME INFORMATION AS OF 12:00 ON 83/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CH1/0  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
ULIAN DAY =	19										
16G	1.4	199	9	12: 0	5.16E-15	4.81E-13	4.81E-13	TH	150.	56.2	1.47E-05
16G	SB	199	9	12: 0	1.21E-14	1.12E-12	1.12E-12	TH	91.5	0.0	3.46E-05
15G	2.8	201	9	12: 0	1.90E-15	1.77E-13	1.77E-13	TH	271.	84.9	5.52E-06
14G	4.2	203	9	12: 0	1.06E-15	9.95E-11	9.95E-11	TH	383.	107.	3.15E-06
13G	6.9	207	9	12: 0	7.13E-16	6.64E-14	6.64E-14	TH	490.	126.	2.14E-06
12G	8.3	207	9	12: 0	3.68E-16	3.43E-14	3.43E-14	TH	692.	157.	1.12E-06
11G	9.8	207	9	12: 0	2.68E-16	2.50E-14	2.50E-14	TH	799.	172.	8.38E-07
10G	11.5	206	9	12: 0	1.99E-16	1.85E-14	1.85E-14	TH	911.	187.	6.35E-07
9G	13.2	205	9	12: 0	1.51E-16	1.41E-14	1.41E-14	TH	1030	202.	4.93E-07
8G	14.9	204	9	12: 0	1.23E-16	1.15E-14	1.15E-14	TH	1154	216.	4.13E-07
7G	16.6	204	9	12: 0	1.03E-16	9.67E-15	9.67E-15	TH	1277	230.	3.54E-07
6G	18.3	203	9	12: 0	8.81E-17	8.21E-15	8.21E-15	TH	1397	243.	3.09E-07
5G	19.9	203	9	12: 0	7.60E-17	7.08E-15	7.08E-15	TH	1516	255.	2.73E-07
4G	21.6	202	9	12: 0	6.48E-17	6.05E-15	6.05E-15	TH	1633	267.	2.40E-07
3G	23.3	201	9	12: 0	5.59E-17	5.21E-15	5.21E-15	TH	1751	278.	2.14E-07
2G	25.0	201	9	12: 0	4.83E-17	4.50E-15	4.50E-15	TH	1869	289.	1.91E-07
1G	26.7	200	9	12: 0	4.20E-17	3.91E-15	3.91E-15	TH	1988	299.	1.72E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:03

STABILITY CLASS D

DATE: 83/01/19

ELEV: 5.7 MPH FROM 019 DEG

CURRENT PLUME INFORMATION AS OF 12:00 ON 83/01/19  
PRESENT LOCATION

ID	MILE	DEC SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN	2.14*SIGMA	CHI/Q		
				WHOLE BODY	THYROID				DOSE RATE ID	Y
JULIAN DAY = 19										
1E	1.4	199	9 12: 0	5.21E+02	1.91E+01	5.21E+02	WB	149.	55.2	5.72E-06
1E	SB	199	9 12: 0	4.98E+02	1.82E+01	4.98E+02	WB	90.8	0.0	5.46E-06
1E	2.8	201	9 12: 0	3.28E+02	1.21E+01	3.28E+02	WB	268.	83.7	3.68E-06
1E	4.2	203	9 12: 0	2.52E+02	9.48E+00	2.52E+02	WB	379.	105.	3.01E-06
1E	6.9	207	9 12: 0	1.05E+02	3.99E+00	1.05E+02	WB	505.	141.	1.43E-06
1E	8.3	207	9 12: 0	5.43E+01	2.08E+00	5.43E+01	WB	693.	157.	1.05E-06
1E	9.8	207	9 12: 0	1.04E+01	4.03E+01	4.03E+01	TH	807.	173.	7.81E-07
1E	11.5	206	9 12: 0	2.03E-01	1.74E-01	1.74E-01	TH	926.	189.	5.67E-07
1E	13.2	205	9 12: 0	1.53E-01	3.60E-01	3.60E-01	TH	1052	204.	4.42E-07
1E	14.9	204	9 12: 0	1.26E-01	3.00E-01	3.00E-01	TH	1175	219.	3.86E-07
1E	16.6	204	9 12: 0	1.03E-01	2.47E-01	2.47E-01	TH	1296	232.	3.34E-07
1E	18.3	203	9 12: 0	8.40E-02	2.02E-01	2.02E-01	TH	1416	245.	2.93E-07
1E	19.9	203	9 12: 0	6.84E-02	1.65E-01	1.65E-01	TH	1533	257.	2.61E-07
1E	21.6	202	9 12: 0	5.18E-02	1.26E-01	1.26E-01	TH	1652	268.	2.27E-07
1E	23.3	201	9 12: 0	3.82E-02	9.38E-02	9.38E-02	TH	1770	279.	2.03E-07
1E	25.0	201	9 12: 0	2.57E-02	6.35E-02	6.35E-02	TH	1889	290.	1.81E-07
1E	26.7	200	9 12: 0	6.93E-03	1.72E-02	1.72E-02	TH	2009	301.	1.64E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:03

STABILITY CLASS D

ATE: 83/01/19

LEV: 5.7 MPH FROM 019 DEG

CURRENT PLUME INFORMATION AS OF 12:00 ON 83/01/19  
ABBRIVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE II Y Z  
WHOLE BODY THYROID

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE II	Y	Z
ULIAN DAY =	19								
16G	1.4	199	9	12: 0	5.16E-15	4.81E-13	4.81E-13	TH	150.
16G	SB	199	9	12: 0	1.21E-14	1.12E-12	1.12E-12	TH	91.5
16G	2.8	201	9	12: 0	1.90E-15	1.77E-13	1.77E-13	TH	271.
19G	4.2	203	9	12: 0	1.06E-15	9.95E-14	9.95E-14	TH	383.
13G	6.9	207	9	12: 0	7.13E-16	6.64E-14	6.64E-14	TH	490.
12G	8.3	207	9	12: 0	3.68E-16	3.43E-14	3.43E-14	TH	692.
11G	9.8	207	9	12: 0	2.68E-16	2.50E-14	2.50E-14	TH	799.
10G	11.5	206	9	12: 0	1.99E-16	1.85E-14	1.85E-14	TH	911.
9G	13.2	205	9	12: 0	1.51E-16	1.41E-14	1.41E-14	TH	1030.
8G	14.9	204	9	12: 0	1.23E-16	1.15E-14	1.15E-14	TH	1154
7G	16.6	204	9	12: 0	1.03E-16	9.67E-15	9.67E-15	TH	1277
6G	18.3	203	9	12: 0	8.81E-17	8.21E-15	8.21E-15	TH	1397
5G	19.9	203	9	12: 0	7.60E-17	7.08E-15	7.08E-15	TH	1516
4G	21.6	202	9	12: 0	6.48E-17	6.05E-15	6.05E-15	TH	1633
3G	23.3	201	9	12: 0	5.59E-17	5.21E-15	5.21E-15	TH	1751
2G	25.0	201	9	12: 0	4.83E-17	4.50E-15	4.50E-15	TH	1869
1G	26.7	200	9	12: 0	4.20E-17	3.91E-15	3.91E-15	TH	1988
1G	30.0	200	9	12:34	3.55E-17	3.31E-15	3.31E-15	TH	2211
1G	40.0	200	9	14:19	2.33E-17	2.17E-15	2.17E-15	TH	2891
	50.0	200	9	16: 5	1.68E-17	1.56E-15	1.56E-15	TH	3564

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:04

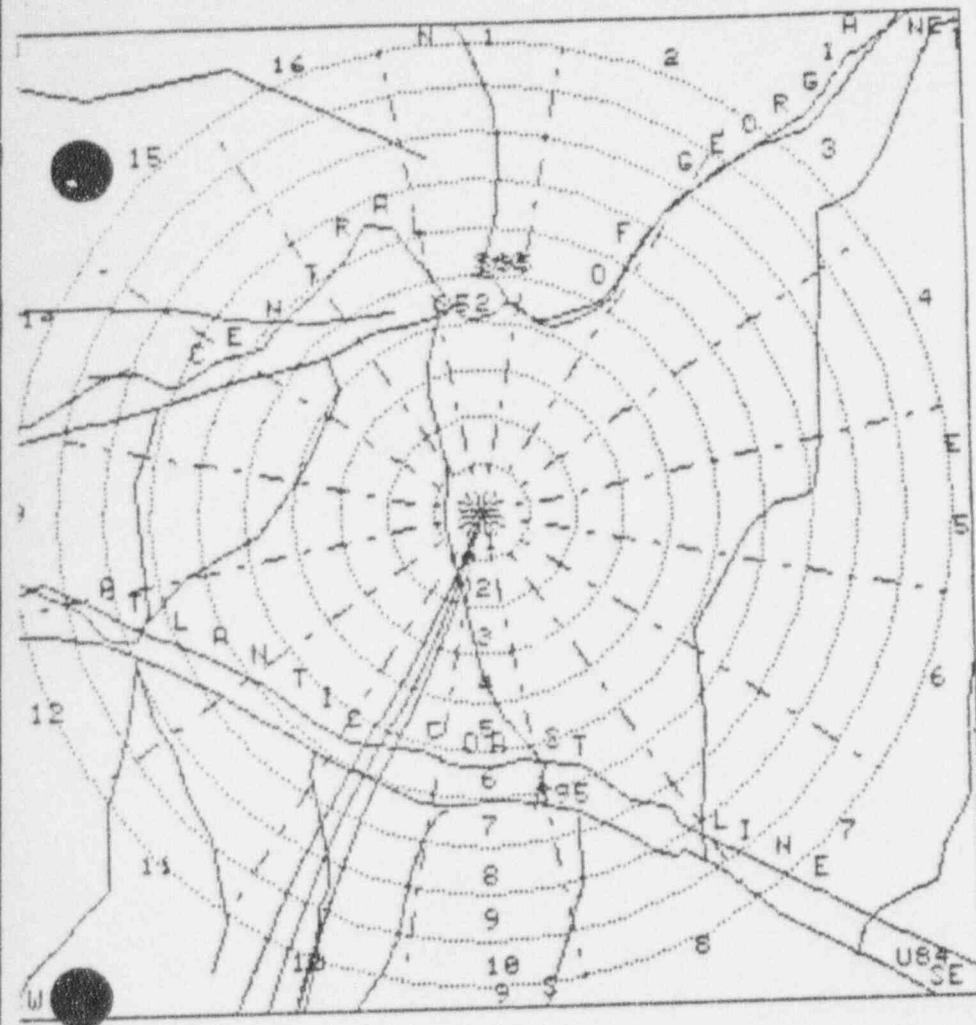
STABILITY CLASS D

DATE: 83/01/19

LEV: 5.7 MPH FROM 019 DEG

CURRENT PLUME INFORMATION AS OF 12:00 ON 83/01/19  
ABBREVIATED PROJECTION

ID	MILE	DEG	SEC	TIME	DOSE RATE (MR/Hr)		HIGH DOSE ORGAN	2.11*SIGMA	CHI/Q
					WHOLE BODY	THYROID			
JULIAN DAY = 19									
1E	1.4	199	9	12: 0	5.21E+02	1.91E+01	5.21E+02	WB	149.
1E	SB	199	9	12: 0	4.98E+02	1.82E+01	4.98E+02	WB	90.8
1E	2.8	201	9	12: 0	3.28E+02	1.21E+01	3.28E+02	WB	268.
1E	4.2	203	9	12: 0	2.52E+02	9.48E+00	2.52E+02	WB	379.
1E	6.9	207	9	12: 0	1.05E+02	3.99E+00	1.05E+02	WB	585.
1E	8.3	207	9	12: 0	5.43E+01	2.08E+00	5.43E+01	WB	693.
1E	9.8	207	9	12: 0	1.04E+01	4.03E+01	4.03E+01	TH	807.
1E	11.5	206	9	12: 0	2.03E-01	4.74E-01	4.74E-01	TH	926.
9E	13.2	205	9	12: 0	1.53E-01	3.60E-01	3.60E-01	TH	1052
8E	14.9	204	9	12: 0	1.26E-01	3.00E-01	3.00E-01	TH	1175
7E	16.6	204	9	12: 0	1.03E-01	2.47E-01	2.47E-01	TH	1296
6E	18.3	203	9	12: 0	8.40E-02	2.02E-01	2.02E-01	TH	1416
5E	19.9	203	9	12: 0	6.84E-02	1.65E-01	1.65E-01	TH	1533
4E	21.6	202	9	12: 0	5.18E-02	1.26E-01	1.26E-01	TH	1652
3E	23.3	201	9	12: 0	3.82E-02	9.38E-02	9.38E-02	TH	1770
2E	25.0	201	9	12: 0	2.57E-02	6.35E-02	6.35E-02	TH	1889
1E	26.7	200	9	12: 0	6.93E-03	1.72E-02	1.72E-02	TH	2009
1E	30.0	200	9	12:34	5.88E-03	1.46E-02	1.46E-02	TH	2232
40.0	200	9	14:19	3.90E-03	9.71E-03	9.71E-03	TH	2912	
50.0	200	9	16: 5	2.83E-03	7.05E-03	7.05E-03	TH	3585	



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 2:065  
ELEV: 5.7 MPH FROM 019 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 12:00

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

JINTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 12:18  
STABILITY CLASS D

83/01/19

5.8 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 12:15 ON 83/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z  
TIME WHOLE BODY THYROID

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z		
JULIAN DAY = 19											
19G	1.5	195	9	12:15	4.79E-15	4.64E-13	4.64E-13	TH	152.	56.9	1.40E-05
19G	SB	195	9	12:15	1.15E-14	1.11E-12	1.11E-12	TH	91.5	0.0	3.39E-05
19G	2.9	197	9	12:15	1.76E-15	1.71E-13	1.71E-13	TH	275.	85.9	5.26E-06
19G	4.3	199	9	12:15	9.92E-16	9.60E-14	9.60E-14	TH	390.	108.	3.00E-06
19G	5.6	201	9	12:15	6.63E-16	6.41E-14	6.41E-14	TH	498.	127.	2.04E-06
19G	8.3	205	9	12:15	4.86E-16	4.70E-14	4.70E-14	TH	602.	144.	1.52E-06
19G	9.7	205	9	12:15	2.78E-16	2.69E-14	2.69E-14	TH	802.	173.	8.88E-07
11G	11.3	205	9	12:15	2.09E-16	2.02E-14	2.02E-14	TH	907.	187.	6.82E-07
10G	12.9	205	9	12:15	1.59E-16	1.54E-14	1.54E-14	TH	1019	200.	5.31E-07
7G	14.6	204	9	12:15	1.23E-16	1.19E-14	1.19E-14	TH	1136	214.	4.20E-07
8G	16.3	204	9	12:15	1.03E-16	9.99E-15	9.99E-15	TH	1259	228.	3.58E-07
7G	18.0	203	9	12:15	8.78E-17	8.49E-15	8.49E-15	TH	1381	241.	3.12E-07
6G	19.7	203	9	12:15	7.54E-17	7.29E-15	7.29E-15	TH	1501	254.	2.75E-07
5G	21.4	202	9	12:15	6.56E-17	6.35E-15	6.35E-15	TH	1619	265.	2.46E-07
4G	23.1	201	9	12:15	5.65E-17	5.46E-15	5.46E-15	TH	1736	277.	2.18E-07
3G	24.8	201	9	12:15	4.90E-17	4.74E-15	4.74E-15	TH	1853	287.	1.95E-07
2G	26.5	201	9	12:15	4.26E-17	4.12E-15	4.12E-15	TH	1971	298.	1.75E-07
1G	28.2	200	9	12:15	3.72E-17	3.60E-15	3.60E-15	TH	2090	308.	1.59E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:18  
STABILITY CLASS D

DATE: 03/01/19

5.8 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 12:15 ON 03/01/19  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.10%SIGMA CHI/Q  
DOSE RATE ID Y Z  
WHOLE BODY THYROID

ID	MILE	DEC SEC	TIME	DOSE RATE (MR/HR)	DOSE RATE ID	Y	Z
JULIAN DAY =	19						
1E	1.5	195	9	12:15	4.88E+02	1.86E+01	4.88E+02
1E	SB	195	9	12:15	4.77E+02	1.82E+01	4.77E+02
1E	2.9	197	9	12:15	3.07E+02	1.18E+01	3.07E+02
1E	4.3	199	9	12:15	2.41E+02	9.45E+00	2.41E+02
1E	5.6	201	9	12:15	1.47E+02	5.82E+00	1.47E+02
1E	8.3	205	9	12:15	7.82E+01	3.13E+00	7.82E+01
1E	9.7	205	9	12:15	4.11E+01	1.66E+00	4.11E+01
1E	11.3	205	9	12:15	7.81E+00	3.18E+01	3.18E+01
1E	12.9	205	9	12:15	1.63E-01	4.01E-01	4.01E-01
9E	14.6	204	9	12:15	1.25E-01	3.10E-01	3.10E-01
8E	16.3	204	9	12:15	1.05E-01	2.62E-01	2.62E-01
7E	18.0	203	9	12:15	8.71E-02	2.19E-01	2.19E-01
6E	19.7	203	9	12:15	7.12E-02	1.80E-01	1.80E-01
5E	21.4	202	9	12:15	5.78E-02	1.47E-01	1.47E-01
4E	23.1	201	9	12:15	4.47E-02	1.14E-01	1.14E-01
3E	24.8	201	9	12:15	3.32E-02	8.58E-02	8.58E-02
2E	26.5	201	9	12:15	2.24E-02	5.84E-02	5.84E-02
4E	28.2	200	9	12:15	6.08E-03	1.59E-02	1.59E-02

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 12:19  
STABILITY CLASS D

DATE: 83/01/19

ELEM: 5.8 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 12:15 ON 83/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY =	19										
18G	1.5	195	9	12:15	4.79E-15	4.64E-13	4.64E-13	TH	152.	56.9	1.40E-05
18G	SB	195	9	12:15	1.15E-14	1.11E-12	1.11E-12	TH	91.5	0.0	3.39E-05
18G	2.9	197	9	12:15	1.76E-15	1.71E-13	1.71E-13	TH	275.	85.9	5.26E-06
18G	4.3	199	9	12:15	9.92E-16	9.60E-14	9.60E-14	TH	390.	108	3.00E-06
18G	5.6	201	9	12:15	6.63E-16	6.41E-14	6.41E-14	TH	498.	127.	2.04E-06
18G	8.3	205	9	12:15	4.86E-16	4.70E-14	4.70E-14	TH	602.	144.	1.52E-06
12G	9.7	205	9	12:15	2.78E-16	2.69E-14	2.69E-14	TH	802.	173.	8.88E-07
11G	11.3	205	9	12:15	2.09E-16	2.02E-14	2.02E-14	TH	907.	187.	6.82E-07
10G	12.9	205	9	12:15	1.59E-16	1.54E-14	1.54E-14	TH	1019	200.	5.31E-07
9G	14.6	204	9	12:15	1.23E-16	1.19E-14	1.19E-14	TH	1136	214.	4.20E-07
8G	16.3	204	9	12:15	1.03E-16	9.99E-15	9.99E-15	TH	1259	228.	3.58E-07
7G	18.0	203	9	12:15	8.78E-17	8.19E-15	8.49E-15	TH	1381	241.	3.12E-07
6G	19.7	203	9	12:15	7.54E-17	7.29E-15	7.29E-15	TH	1501	254.	2.75E-07
5G	21.4	202	9	12:15	6.56E-17	6.35E-15	6.35E-15	TH	1619	265.	2.46E-07
4G	23.1	201	9	12:15	5.65E-17	5.46E-15	5.46E-15	TH	1736	277.	2.18E-07
3G	24.8	201	9	12:15	4.90E-17	4.74E-15	4.74E-15	TH	1853	287.	1.95E-07
2G	26.5	201	9	12:15	4.26E-17	4.12E-15	4.12E-15	TH	1971	298.	1.75E-07
1G	28.2	200	9	12:15	3.72E-17	3.60E-15	3.60E-15	TH	2090	308.	1.59E-07
~	30.0	200	9	12:34	3.40E-17	3.29E-15	3.29E-15	TH	2214	0.0	1.45E-07
~	40.0	199	9	14:17	2.23E-17	2.16E-15	2.16E-15	TH	2896	0.0	9.53E-08
4G	50.0	198	9	16: 0	1.61E-17	1.55E-15	1.55E-15	TH	3570	0.0	6.88E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:19  
STABILITY CLASS D

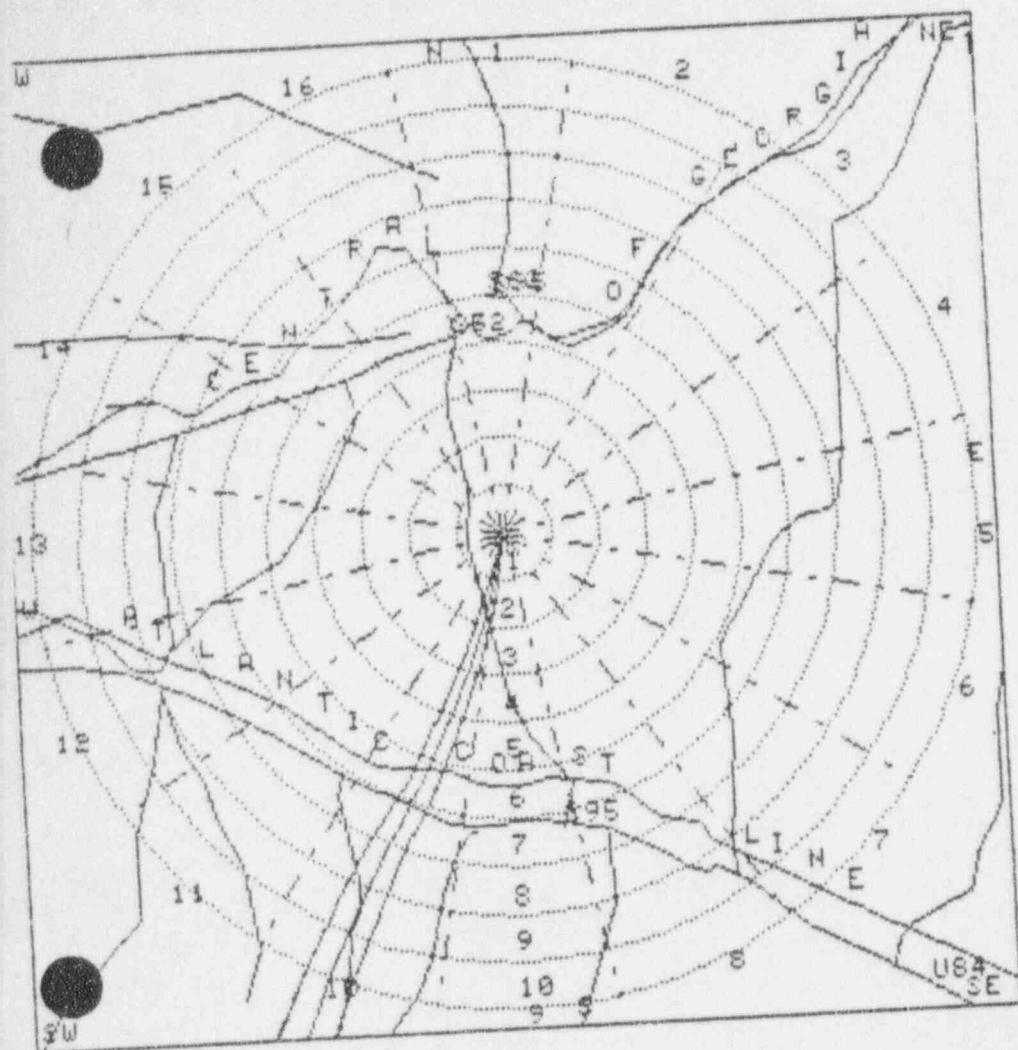
DATE: 83/01/19

LF 5.8 MPH FROM 015 DEG  
CURRENT PLUME INFORMATION AS OF 12:15 ON 83/01/19

ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z
JULIAN DAY =	19								
1E	1.5	195	9	12:15	4.88E+02	1.86E+01	4.88E+02	WB	152.
1E	5B	195	9	12:15	4.77E+02	1.82E+01	4.77E+02	WB	90.8
1E	2.9	197	9	12:15	3.07E+02	1.18E+01	3.07E+02	WB	273.
1E	4.5	199	9	12:15	2.41E+02	9.45E+00	2.41E+02	WB	385.
1E	5.6	201	9	12:15	1.47E+02	5.82E+00	1.47E+02	WB	492.
1E	8.3	205	9	12:15	7.82E+01	3.13E+00	7.82E+01	WB	694.
1E	9.7	205	9	12:15	4.11E+01	1.66E+00	4.11E+01	WB	801.
1E	11.3	205	9	12:15	7.81E+00	3.18E+01	3.18E+01	TH	913.
1E	12.9	205	9	12:15	1.63E-01	4.01E-01	4.01E-01	TH	1032
9E	14.6	204	9	12:15	1.25E-01	3.10E-01	3.10E-01	TH	1156
8E	16.3	204	9	12:15	1.05E-01	2.62E-01	2.62E-01	TH	1278
7E	18.0	203	9	12:15	8.71E-02	2.19E-01	2.19E-01	TH	1399
6E	19.7	203	9	12:15	7.12E-02	1.80E-01	1.80E-01	TH	1518
5E	21.4	202	9	12:15	5.78E-02	1.47E-01	1.47E-01	TH	1635
4E	23.1	201	9	12:15	4.47E-02	1.14E-01	1.14E-01	TH	1753
3E	24.8	201	9	12:15	3.32E-02	8.58E-02	8.58E-02	TH	1871
2E	26.5	201	9	12:15	2.24E-02	5.84E-02	5.84E-02	TH	1990
1E	28.2	200	9	12:15	6.08E-03	1.59E-02	1.59E-02	TH	2109
30.0	200	9	12:34	5.56E-03	1.45E-02	1.45E-02	TH	2233	
1E	40.0	199	9	14:17	3.69E-03	9.65E-03	9.65E-03	TH	2915
1E	50.0	198	9	16: 0	2.68E-03	7.01E-03	7.01E-03	TH	3589



ACTUAL INCIDENT  
 FARLEY NUCLEAR PLANT  
 DATE: 83/01/14 -DAY- TIME: 2:210  
 ELEV: 5.8 MPH FROM 015 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 12:15

ROADS AND RAILROADS		STATUS
TOGGLE		
1.	FEDERAL ROADS	ON
2.	STATE ROADS	ON
3.	COUNTY ROADS	ON
4.	RAILROADS	ON
5.	ALL ON	
6.	ALL OFF	
7.	EXIT	

JINTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:33

STABILITY CLASS D

ATE: 03/01/19

LEH: 5.0 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 12:30 ON 03/01/19  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z  
TIME WHOLE BODY THYROID DOSE RATE ID

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z	
TULIAN DAY =	19									
18G	1.2	195	9	12:30	6.79E-15	6.82E-13	TH	134.	51.9	2.04E-05
18G	SB	195	9	12:30	1.31E-11	1.31E-12	TH	91.5	0.0	3.95E-05
17G	2.7	195	9	12:30	2.11E-15	2.11E-13	TH	241.	78.4	6.45E-06
16G	4.1	197	9	12:30	1.08E-15	1.09E-13	TH	359.	102.	7E-06
15G	5.5	198	9	12:30	6.97E-16	6.99E-14	TH	577.	122.	1.14E-06
14G	6.9	200	9	12:30	4.99E-16	5.01E-14	TH	680.	140.	1.24E-06
13G	9.5	204	9	12:30	3.83E-16	3.84E-14	TH	878.	156.	7.67E-07
12G	10.9	204	9	12:30	2.30E-16	2.31E-14	TH	982.	183.	5.99E-07
11G	12.5	204	9	12:30	1.76E-16	1.77E-14	TH	1093	209.	4.73E-07
10G	14.1	204	9	12:30	1.37E-16	1.37E-14	TH	1210	223.	3.80E-07
9G	15.9	204	9	12:30	1.07E-16	1.07E-14	TH	1333	236.	3.27E-07
8G	17.6	203	9	12:30	9.06E-17	9.09E-15	TH	1454	249.	2.87E-07
7G	19.3	203	9	12:30	7.76E-17	7.79E-15	TH	1574	261.	2.55E-07
6G	21.0	202	9	12:30	6.71E-17	6.73E-15	TH	1692	272.	2.30E-07
5G	22.6	202	9	12:30	5.88E-17	5.90E-15	TH	1808	283.	2.04E-07
4G	24.3	201	9	12:30	5.08E-17	5.10E-15	TH	1925	294.	1.84E-07
3G	26.0	201	9	12:30	4.43E-17	4.45E-15	TH	2043	304.	1.66E-07
2G	27.7	200	9	12:30	3.86E-17	3.88E-15	TH	2161	314.	1.51E-07
1G	29.4	200	9	12:30	3.39E-17	3.40E-15	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 12:33  
STABILITY CLASS D

DATE: 83/01/19

ELEV: 5.0 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 12:30 ON 83/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	WB	TH	Y	Z	
JULIAN DAY = 19											
18E	1.2	195	9	12:30	4.66E+02	1.85E+01	4.66E+02	WB	133.	50.8	5.76E-06
18E	SB	195	9	12:30	3.91E+02	1.55E+01	3.91E+02	WB	90.0	0.0	4.83E-06
18E	2.7	195	9	12:30	3.05E+02	1.23E+01	3.05E+02	WB	258.	81.5	3.75E-06
18E	4.1	197	9	12:30	2.41E+02	9.81E+00	2.41E+02	WB	373.	104.	2.96E-06
18E	5.5	198	9	12:30	1.49E+02	6.13E+00	1.49E+02	WB	482.	124.	1.87E-06
18E	6.9	200	9	12:30	1.05E+02	4.37E+00	1.05E+02	WB	587.	141.	1.40E-06
18E	9.5	204	9	12:30	6.10E+01	2.56E+00	6.10E+01	WB	786.	170.	9.31E-07
12E	10.9	204	9	12:30	3.15E+01	1.34E+00	3.15E+01	WB	892.	184.	6.82E-07
11E	12.5	204	9	12:30	6.41E+00	2.74E+01	2.74E+01	TH	1004	198.	5.35E-07
10E	14.1	204	9	12:30	1.36E-01	3.52E-01	3.52E-01	TH	1121	212.	4.24E-07
9E	15.9	204	9	12:30	1.06E-01	2.76E-01	2.76E-01	TH	1245	226.	3.42E-07
8E	17.6	203	9	12:30	8.95E-02	2.35E-01	2.35E-01	TH	1367	239.	3.04E-07
7E	19.3	203	9	12:30	7.50E-02	1.98E-01	1.98E-01	TH	1486	252.	2.69E-07
6E	21.0	202	9	12:30	6.10E-02	1.62E-01	1.62E-01	TH	1605	264.	2.37E-07
5E	22.6	202	9	12:30	5.05E-02	1.35E-01	1.35E-01	TH	1722	275.	2.15E-07
4E	24.3	201	9	12:30	3.93E-02	1.06E-01	1.06E-01	TH	1839	286.	1.92E-07
3E	26.0	201	9	12:30	2.93E-02	7.97E-02	7.97E-02	TH	1957	296.	1.73E-07
2E	27.7	200	9	12:30	1.99E-02	5.45E-02	5.45E-02	TH	2075	307.	1.57E-07
1E	29.4	200	9	12:30	5.41E-03	1.49E-02	1.49E-02	TH	2194	317.	1.43E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 12:34  
STABILITY CLASS D

ATE: 83/01/19

LEV: 5.0 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 12:30 ON 83/01/19

ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.11\*SIGMA CHI/Q  
DOSE RATE ID Y Z  
WHOLE BODY THYROID

ID	MILE	DEG	SEC	TIME	DOSE RATE (MR/HR)	DOSE RATE ID	Y	Z
JULIAN DAY =	19							
1G	1.2	195	9	12:30	6.79E-15	6.82E-13	6.82E-13	TH 134.
1G	SB	195	9	12:30	1.31E-14	1.31E-12	1.31E-12	TH 91.5
1G	2.7	195	9	12:30	2.11E-15	2.11E-13	2.11E-13	TH 241.
1G	4.1	197	9	12:30	1.08E-15	1.09E-13	1.09E-13	TH 359.
1G	5.5	198	9	12:30	6.97E-16	6.99E-14	6.99E-14	TH 471.
1G	6.9	200	9	12:30	4.99E-16	5.01E-14	5.01E-14	TH 577.
1G	9.5	204	9	12:30	3.83E-16	3.84E-14	3.84E-14	TH 680.
1G	10.9	204	9	12:30	2.30E-16	2.31E-14	2.31E-14	TH 878.
1G	12.5	204	9	12:30	1.76E-16	1.77E-14	1.77E-14	TH 982.
1G	14.1	204	9	12:30	1.37E-16	1.37E-14	1.37E-14	TH 1093.
9G	15.9	204	9	12:30	1.07E-16	1.07E-14	1.07E-14	TH 1210
8G	17.6	203	9	12:30	9.06E-17	9.09E-15	9.09E-15	TH 1333
7G	19.3	203	9	12:30	7.76E-17	7.79E-15	7.79E-15	TH 1454
6G	21.0	202	9	12:30	6.71E-17	6.73E-15	6.73E-15	TH 1574
5G	22.6	202	9	12:30	5.88E-17	5.90E-15	5.90E-15	TH 1692
4G	24.3	201	9	12:30	5.08E-17	5.10E-15	5.10E-15	TH 1809
3G	26.0	201	9	12:30	4.43E-17	4.45E-15	4.45E-15	TH 1925
2G	27.7	200	9	12:30	3.86E-17	3.88E-15	3.88E-15	TH 2043
4G	29.4	200	9	12:30	3.39E-17	3.40E-15	3.40E-15	TH 2161
-	30.0	200	9	12:37	3.30E-17	3.31E-15	3.31E-15	TH 2200
1G	40.0	199	9	14:37	2.16E-17	2.17E-15	2.17E-15	TH 2880
1G	50.0	198	9	16:37	1.55E-17	1.56E-15	1.56E-15	TH 3553

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:34

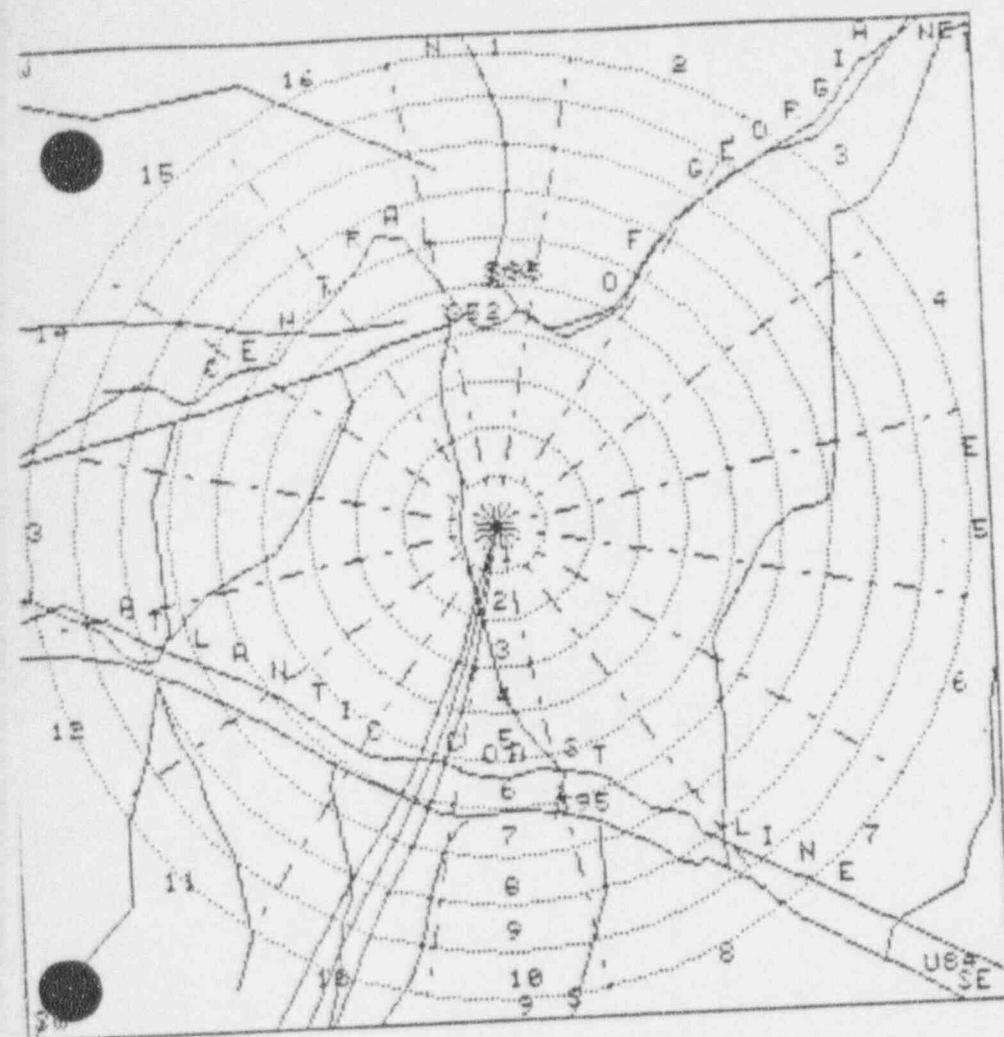
STABILITY CLASS D

DATE: 83/01/19

ELEV: 5.0 MPH FROM 015 DEG

CURRENT PLUME INFORMATION AS OF 12:30 ON 83/01/19  
ABBREVIATED PROJECTION

ID	MILE	DEC SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN	2.14*SIGMA	CHI/Q
				WHOLE BODY	THYROID			
JULIAN DAY = 17								
18E	1.2	195	9 12:30	4.66E+02	1.85E+01	4.66E+02	WB 133.	50.8 5.76E-06
18E	58	195	9 12:30	3.91E+02	1.55E+01	3.91E+02	WB 90.8	0.0 4.83E-06
18E	2.7	195	9 12:30	3.05E+02	1.23E+01	3.05E+02	WB 258.	81.5 3.75E-06
18E	4.1	197	9 12:30	2.41E+02	9.81E+00	2.41E+02	WB 373.	104. 2.96E-06
18E	5.5	198	9 12:30	1.49E+02	6.13E+00	1.49E+02	WB 482.	124. 1.87E-06
19E	6.9	200	9 12:30	1.05E+02	4.37E+00	1.05E+02	WB 587.	141. 9.31E-07
19E	9.5	204	9 12:30	6.10E+01	2.56E+00	6.10E+01	WB 786.	170. 6.82E-07
12E	10.9	204	9 12:30	3.15E+01	1.34E+00	3.15E+01	WB 892.	184. 5.35E-07
11E	12.5	204	9 12:30	6.41E+00	2.74E+01	2.74E+01	TH 1004	198. 4.24E-07
10E	14.1	204	9 12:30	1.36E-01	3.52E-01	3.52E-01	TH 1121	212. 3.42E-07
9E	15.9	204	9 12:30	1.06E-01	2.76E-01	2.76E-01	TH 1245	226. 3.04E-07
8E	17.6	203	9 12:30	8.95E-02	2.35E-01	2.35E-01	TH 1367	239. 2.69E-07
7E	19.3	203	9 12:30	7.50E-02	1.98E-01	1.98E-01	TH 1486	252. 2.37E-07
6E	21.0	202	9 12:30	6.10E-02	1.62E-01	1.62E-01	TH 1605	264. 2.15E-07
5E	22.6	202	9 12:30	5.05E-02	1.35E-01	1.35E-01	TH 1722	275. 1.92E-07
4E	24.3	201	9 12:30	3.93E-02	1.06E-01	1.06E-01	TH 1839	286. 1.73E-07
3E	26.0	201	9 12:30	2.93E-02	7.97E-02	7.97E-02	TH 1957	296. 1.57E-07
2E	27.7	200	9 12:30	1.99E-02	5.45E-02	5.45E-02	TH 2075	307. 1.43E-07
-	29.4	200	9 12:30	5.41E-03	1.49E-02	1.49E-02	TH 2194	317. 1.39E-07
-	30.0	200	9 12:37	5.27E-03	1.45E-02	1.45E-02	TH 2233	0.0 9.25E-08
1E	40.0	199	9 14:37	3.49E-03	9.62E-03	9.62E-03	TH 2913	0.0 6.72E-08
1E	50.0	198	9 16:37	2.54E-03	6.99E-03	6.99E-03	TH 3586	0.0



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 12:36  
 ELEV: 5.0 MPH FROM 015 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 12:30

ROADS AND RAILROADS		STATUS
TOGGLE		
1. FEDERAL ROADS		ON
2. STATE ROADS		ON
3. COUNTY ROADS		ON
4. RAILROADS		ON
5. ALL ON		
6. ALL OFF		
7. EXIT		

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:49

DATE: 03/01/19

STABILITY CLASS D

ELEV: 4.1 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 12:45 ON 03/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	Y	Z		
JULIAN DAY = 19											
19G	1.0	196	9	12:45	1.04E-14	1.08E-12	1.08E-12	TH	114.	46.4	3.22E-05
P9C	5B	196	9	12:45	1.51E-14	1.60E-12	1.60E-12	TH	91.5	0.0	4.77E-05
18G	2.3	196	9	12:45	3.15E-15	3.27E-13	3.27E-13	TH	206.	70.2	9.87E-06
19D	3.7	195	9	12:45	1.34E-15	1.39E-13	1.39E-13	TH	309.	92.8	4.26E-06
12G	5.2	196	9	12:45	7.94E-16	8.25E-14	8.25E-14	TH	424.	114.	2.56E-06
15G	6.5	198	9	12:45	5.44E-16	5.66E-14	5.66E-14	TH	639.	149.	1.35E-06
19G	7.9	200	9	12:45	4.06E-16	4.22E-14	4.22E-14	TH	741.	161.	1.08E-06
13G	10.5	203	9	12:45	3.20E-16	3.32E-14	3.32E-14	TH	937.	190.	6.89E-07
12G	12.0	204	9	12:45	1.99E-16	2.07E-14	2.07E-14	TH	1042	203.	5.15E-07
11G	13.5	204	9	12:45	1.54E-16	1.60E-14	1.60E-14	TH	1152	216.	4.35E-07
10G	15.1	204	9	12:45	1.21E-16	1.25E-14	1.25E-14	TH	1269	229.	3.52E-07
9G	16.9	203	9	12:45	9.59E-17	9.96E-15	9.96E-15	TH	1391	242.	3.06E-07
8G	18.6	203	9	12:45	8.14E-17	8.45E-15	8.45E-15	TH	1512	255.	2.70E-07
7G	20.3	202	9	12:45	7.02E-17	7.29E-15	7.29E-15	TH	1631	266.	2.41E-07
6G	22.0	202	9	12:45	6.10E-17	6.34E-15	6.34E-15	TH	1749	278.	2.18E-07
5G	23.6	201	9	12:45	5.36E-17	5.57E-15	5.57E-15	TH	1865	288.	1.95E-07
4G	25.3	201	9	12:45	4.66E-17	4.84E-15	4.84E-15	TH	1982	299.	1.76E-07
3G	27.0	201	9	12:45	4.07E-17	4.23E-15	4.23E-15	TH	2099	309.	1.59E-07
2G	28.7	200	9	12:45	3.56E-17	3.70E-15	3.70E-15	TH	2217	319.	1.45E-07
	30.5	200	9	12:45	3.13E-17	3.25E-15	3.25E-15	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:49

DATE: 03/01/19

STABILITY CLASS D

ELEV: 4.1 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 12:45 ON 03/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14(SIGMA) CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	WB	TH	Y	Z
JULIAN DAY = 19											
19E	1.0	196	9	12:45	3.51E+02	1.45E+01	3.51E+02	WB	114.	45.2	4.65E-06
29E	SB	196	9	12:45	2.79E+02	1.15E+01	2.79E+02	WB	90.8	0.0	3.69E-06
18E	2.3	196	9	12:45	3.58E+02	1.50E+01	3.58E+02	WB	223.	73.6	4.68E-06
17E	3.7	195	9	12:45	2.50E+02	1.06E+01	2.50E+02	WB	342.	98.9	3.24E-06
16E	5.2	196	9	12:45	1.55E+02	6.63E+00	1.55E+02	WB	454.	119.	2.00E-06
15E	6.5	198	9	12:45	1.10E+02	4.79E+00	1.10E+02	WB	561.	137.	1.46E-06
14E	7.9	200	9	12:45	8.43E+01	3.69E+00	8.43E+01	WB	664.	153.	1.18E-06
13E	10.5	203	9	12:45	4.78E+01	2.11E+00	4.78E+01	WB	862.	180.	7.71E-07
12E	12.0	204	9	12:45	2.64E+01	1.18E+00	2.64E+01	WB	967.	194.	6.03E-07
11E	13.5	204	9	12:45	5.45E+00	2.45E+01	2.45E+01	TH	1078	207.	4.80E-07
10E	15.1	204	9	12:45	1.16E-01	3.18E-01	3.18E-01	TH	1195	221.	3.85E-07
9E	16.9	203	9	12:45	9.19E-02	2.52E-01	2.52E-01	TH	1318	234.	3.13E-07
8E	18.6	203	9	12:45	7.82E-02	2.16E-01	2.16E-01	TH	1439	247.	2.81E-07
7E	20.3	202	9	12:45	6.50E-02	1.81E-01	1.81E-01	TH	1559	259.	2.47E-07
6E	22.0	202	9	12:45	5.40E-02	1.51E-01	1.51E-01	TH	1677	271.	2.22E-07
5E	23.6	201	9	12:45	4.49E-02	1.26E-01	1.26E-01	TH	1793	282.	2.02E-07
4E	25.3	201	9	12:45	3.51E-02	9.98E-02	9.98E-02	TH	1911	292.	1.81E-07
3E	27.0	201	9	12:45	2.63E-02	7.51E-02	7.51E-02	TH	2028	303.	1.64E-07
2E	28.7	200	9	12:45	1.79E-02	5.15E-02	5.15E-02	TH	2146	313.	1.49E-07
E	30.5	200	9	12:45	4.92E-03	1.42E-02	1.42E-02	TH	2265	323.	1.37E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 12:50

STABILITY CLASS D

DATE: 83/01/19

ELEV: 4.1 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 12:45 ON 83/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z
JULIAN DAY = 19									
19G 1.0 196	9	12:45		1.04E-14	1.08E-12	1.08E-12	TH 114.	46.4	3.22E-05
19G SB 196	9	12:45		1.54E-14	1.60E-12	1.60E-12	TH 91.5	0.0	4.77E-05
19G 2.3 196	9	12:45		3.15E-15	3.27E-13	3.27E-13	TH 206.	70.2	9.87E-06
19G 3.7 195	9	12:45		1.34E-15	1.39E-13	1.39E-13	TH 309.	92.8	4.26E-06
16G 5.2 196	9	12:45		7.94E-16	8.25E-14	8.25E-14	TH 424.	114.	2.56E-06
15G 6.5 198	9	12:45		5.44E-16	5.66E-14	5.66E-14	TH 534.	133.	1.78E-06
19G 7.9 200	9	12:45		4.06E-16	4.22E-14	4.22E-14	TH 639.	149.	1.35E-06
13G 10.5 203	9	12:45		3.20E-16	3.32E-14	3.32E-14	TH 741.	164.	1.08E-06
12G 12.0 204	9	12:45		1.99E-16	2.07E-14	2.07E-14	TH 937.	190.	6.89E-07
11G 13.5 204	9	12:45		1.54E-16	1.60E-14	1.60E-14	TH 1042	203.	5.45E-07
10G 15.1 204	9	12:45		1.21E-16	1.25E-14	1.25E-14	TH 1152	216.	4.35E-07
9G 16.9 203	9	12:45		9.59E-17	9.96E-15	9.96E-15	TH 1269	229.	3.52E-07
8G 18.6 203	9	12:45		8.14E-17	8.45E-15	8.45E-15	TH 1391	242.	3.06E-07
7G 20.3 202	9	12:45		7.02E-17	7.29E-15	7.29E-15	TH 1512	255.	2.70E-07
6G 22.0 202	9	12:45		6.10E-17	6.34E-15	6.34E-15	TH 1631	266.	2.41E-07
5G 23.6 201	9	12:45		5.36E-17	5.57E-15	5.57E-15	TH 1749	278.	2.18E-07
4G 25.3 201	9	12:45		4.66E-17	4.84E-15	4.84E-15	TH 1865	288.	1.95E-07
3G 27.0 201	9	12:45		4.07E-17	4.23E-15	4.23E-15	TH 1982	299.	1.76E-07
2G 28.7 200	9	12:45		3.56E-17	3.70E-15	3.70E-15	TH 2099	309.	1.59E-07
30.5 200	9	12:45		3.13E-17	3.25E-15	3.25E-15	TH 2217	319.	1.45E-07
1G 40.0 199	9	15: 3		2.09E-17	2.17E-15	2.17E-15	TH 2866	0.0	9.69E-08
1G 50.0 198	9	17:28		1.50E-17	1.56E-15	1.56E-15	TH 3539	0.0	6.97E-08

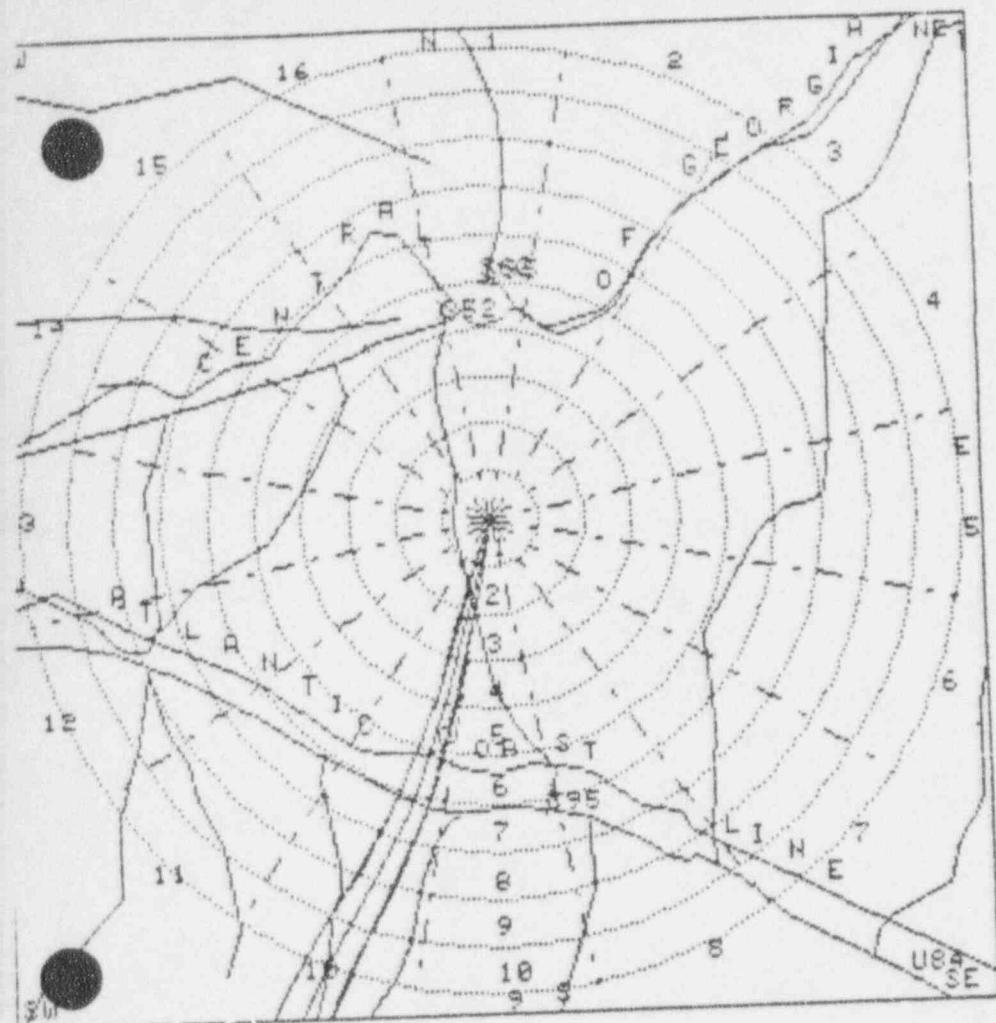
ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 12:50  
STABILITY CLASS D

DATE: 83/01/19

ELEV: 4.1 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 12:45 ON 03/01/19  
ABBREVIATED PROJECTION

ID	MILE	DEG	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN 2.11*SIGMA		CHI/Q		
					WHOLE BODY	THYROID	DOSE RATE ID	Y	Z		
JULIAN DAY = 19											
10E	1.0	196	9	12:45	3.51E+02	1.45E+01	3.51E+02	WB	114.	45.2	4.65E-06
10E	SB	196	9	12:45	2.79E+02	1.15E+01	2.79E+02	WB	90.8	0.0	3.69E-06
10E	2.3	196	9	12:45	3.58E+02	1.50E+01	3.58E+02	WB	223.	73.6	4.68E-06
10E	3.7	195	9	12:45	2.50E+02	1.06E+01	2.50E+02	WB	342.	98.9	3.24E-06
10E	5.2	196	9	12:45	1.55E+02	6.63E+00	1.55E+02	WB	454.	119.	2.00E-06
10E	6.5	198	9	12:45	1.10E+02	4.79E+00	1.10E+02	WB	561.	137.	1.46E-06
10E	7.9	200	9	12:45	8.43E+01	3.69E+00	8.43E+01	WB	664.	153.	1.18E-06
10E	10.5	203	9	12:45	4.78E+01	2.11E+00	4.78E+01	WB	862.	180.	7.71E-07
10E	12.0	204	9	12:45	2.64E+01	1.18E+00	2.64E+01	TH	1078	207.	4.80E-07
10E	13.5	204	9	12:45	5.45E+00	2.45E+01	2.45E+01	TH	1195	221.	3.85E-07
10E	15.1	204	9	12:45	1.16E-01	3.18E-01	3.18E-01	TH	1318	234.	3.13E-07
9E	16.9	203	9	12:45	9.19E-02	2.52E-01	2.52E-01	TH	1439	247.	2.81E-07
8E	18.6	203	9	12:45	7.82E-02	2.16E-01	2.16E-01	TH	1559	259.	2.47E-07
7E	20.3	202	9	12:45	6.50E-02	1.81E-01	1.81E-01	TH	1677	271.	2.22E-07
6E	22.0	202	9	12:45	5.40E-02	1.51E-01	1.51E-01	TH	1793	282.	2.02E-07
5E	23.6	201	9	12:45	4.49E-02	1.26E-01	1.26E-01	TH	1911	292.	1.81E-07
4E	25.3	201	9	12:45	3.51E-02	9.98E-02	9.98E-02	TH	2028	303.	1.64E-07
3E	27.0	201	9	12:45	2.63E-02	7.51E-02	7.51E-02	TH	2146	313.	1.49E-07
2E	28.7	200	9	12:45	1.79E-02	5.15E-02	5.15E-02	TH	2265	323.	1.37E-07
1E	30.5	200	9	12:45	4.92E-03	1.42E-02	1.42E-02	TH	2913	0.0	9.31E-08
1E	40.0	199	9	15: 3	3.33E-03	9.64E-03	9.64E-03	TH	3586	0.0	6.75E-08
1E	50.0	198	9	17:28	2.41E-03	7.00E-03	7.00E-03	TH			



ACTUAL INCIDENT  
 FARLEY NUCLEAR PLANT  
 DATE: 83/01/14 -DAY- TIME: 12:50  
 ELEV: 4.1 MPH FROM 016 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 12:45

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13.04

DATE: 03/01/19

STABILITY CLASS D

ELEV: 3.3 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 13:00 ON 03/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CHI/Q  
TIME WHOLE BODY THYROID DOSE RATE ID Y Z

ID MILE SEC

JULIAN DAY	MILE	SEC	TIME	DOSE RATE	TH	DOSE RATE	ID	Y	Z	
200	.8	196	9 13: 0	1.74E-14	1.87E-12	1.87E-12	TH	95.5	40.7	5.53E-05
200	SB	196	9 13: 0	1.88E-14	2.02E-12	2.02E-12	TH	91.5	0.0	5.96E-05
200	1.9	196	9 13: 0	5.11E-15	5.50E-13	5.50E-13	TH	170.	61.5	1.64E-05
180	3.1	196	9 13: 0	2.07E-15	2.22E-13	2.22E-13	TH	258.	82.0	6.74E-06
170	4.6	196	9 13: 0	1.00E-15	1.08E-13	1.08E-13	TH	358.	102.	3.32E-06
160	6.0	196	9 13: 0	6.40E-16	6.87E-14	6.87E-14	TH	581.	141.	1.55E-06
150	7.4	198	9 13: 0	4.56E-16	4.90E-14	4.90E-14	TH	686.	156.	1.20E-06
140	8.7	199	9 13: 0	3.49E-16	3.75E-14	3.75E-14	TH	787.	171.	9.84E-07
130	11.4	202	9 13: 0	2.79E-16	3.00E-14	3.00E-14	TH	982.	196.	6.39E-07
120	12.8	203	9 13: 0	1.78E-16	1.91E-14	1.91E-14	TH	1087	209.	5.09E-07
110	14.3	203	9 13: 0	1.39E-16	1.49E-14	1.49E-14	TH	1196	221.	4.09E-07
100	16.0	203	9 13: 0	1.09E-16	1.18E-14	1.18E-14	TH	1313	234.	3.33E-07
90	17.7	203	9 13: 0	8.74E-17	9.40E-15	9.40E-15	TH	1435	247.	2.91E-07
80	19.4	202	9 13: 0	7.46E-17	8.01E-15	8.01E-15	TH	1555	259.	2.58E-07
70	21.1	202	9 13: 0	6.46E-17	6.94E-15	6.94E-15	TH	1674	271.	2.31E-07
60	22.8	202	9 13: 0	5.63E-17	6.05E-15	6.05E-15	TH	1792	282.	2.09E-07
50	24.5	201	9 13: 0	4.97E-17	5.34E-15	5.34E-15	TH	1900	292.	1.88E-07
40	26.2	201	9 13: 0	4.32E-17	4.65E-15	4.65E-15	TH	2025	303.	1.70E-07
30	27.9	200	9 13: 0	3.79E-17	4.07E-15	4.07E-15	TH	2142	313.	1.54E-07
20	29.6	200	9 13: 0	3.32E-17	3.57E-15	3.57E-15	TH	2260	323.	1.40E-07
10	31.3	200	9 13: 0	2.93E-17	3.15E-15	3.15E-15	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:04  
STABILITY CLASS D

DATE: 83/01/19

DATE: 83/01/19  
ELEV: 3.3 MPH FROM 016 DEG

9  
PH FROM 016 DEG CURRENT PLUME INFORMATION AS OF 13:00 ON 03/01/19  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CHI/Q  
ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JULIAN DAY =		19									
20E	.8	196	9	13: 0	5.12E+02	2.20E+01	5.12E+02	WB	94.9	39.2	7.26E-06
20E	SB	196	9	13: 0	1.54E+02	6.66E+00	1.54E+02	WB	90.8	0.0	2.19E-06
49E	1.9	196	9	13: 0	3.90E+02	1.69E+01	3.90E+02	WB	188.	65.1	5.44E-06
18E	3.1	196	9	13: 0	3.38E+02	1.49E+01	3.38E+02	WB	292.	88.7	4.66E-06
19E	4.6	196	9	13: 0	1.84E+02	8.21E+00	1.84E+02	WB	408.	111.	2.52E-06
16E	6.0	196	9	13: 0	1.20E+02	5.42E+00	1.20E+02	WB	518.	130.	1.65E-06
15E	7.4	198	9	13: 0	9.16E+01	4.16E+00	9.16E+01	WB	624.	147.	1.28E-06
14E	8.7	199	9	13: 0	6.97E+01	3.20E+00	6.97E+01	WB	726.	162.	1.03E-06
13E	11.4	202	9	13: 0	4.09E+01	1.90E+00	4.09E+01	WB	922.	188.	6.97E-07
12E	12.8	203	9	13: 0	2.28E+01	1.07E+00	2.28E+01	WB	1027	201.	5.51E-07
11E	14.3	203	9	13: 0	4.76E+00	2.25E+01	2.25E+01	TH	1137	214.	4.42E-07
10E	16.0	203	9	13: 0	1.03E-01	2.94E-01	2.94E-01	TH	1254	227.	3.57E-07
9E	17.7	203	9	13: 0	8.15E-02	2.35E-01	2.35E-01	TH	1376	241.	2.93E-07
8E	19.4	202	9	13: 0	6.97E-02	2.02E-01	2.02E-01	TH	1497	253.	2.64E-07
7E	21.1	202	9	13: 0	5.83E-02	1.70E-01	1.70E-01	TH	1617	265.	2.33E-07
6E	22.8	202	9	13: 0	4.86E-02	1.43E-01	1.43E-01	TH	1734	276.	2.10E-07
5E	24.5	201	9	13: 0	4.05E-02	1.20E-01	1.20E-01	TH	1851	287.	1.92E-07
4E	26.2	201	9	13: 0	3.18E-02	9.49E-02	9.49E-02	TH	1968	297.	1.73E-07
3E	27.9	200	9	13: 0	2.38E-02	7.17E-02	7.17E-02	TH	2085	308.	1.57E-07
2E	29.6	200	9	13: 0	1.63E-02	4.93E-02	4.93E-02	TH	2203	318.	1.43E-07
1E	31.3	200	9	13: 0	4.49E-03	1.36E-02	1.36E-02	TH	2322	327.	1.32E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:04

DATE: 03/01/19

STABILITY CLASS D

ELEV: 3.3 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 13:00 ON 03/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CH1/R  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	TH	95.5	40.7	5.53E-05
JULIAN DAY = 19											
20G	.8	196	9	13: 0	1.74E-14	1.87E-12	1.87E-12	TH	91.5	0.0	5.96E-05
20G	SB	196	9	13: 0	1.88E-14	2.02E-12	2.02E-12	TH	170.	61.5	1.64E-05
29G	1.9	196	9	13: 0	5.11E-15	5.50E-13	5.50E-13	TH	258.	82.0	6.74E-06
18G	3.1	196	9	13: 0	2.07E-15	2.22E-13	2.22E-13	TH	358.	102.	3.32E-06
17G	4.6	196	9	13: 0	1.00E-15	1.08E-13	1.08E-13	TH	472.	123.	2.14E-06
16G	6.0	196	9	13: 0	6.40E-16	6.87E-14	6.87E-14	TH	581.	141.	1.55E-06
15G	7.4	198	9	13: 0	4.56E-16	4.90E-14	4.90E-14	TH	686.	156.	1.20E-06
14G	8.7	199	9	13: 0	3.49E-16	3.75E-14	3.75E-14	TH	787.	171.	9.84E-07
13G	11.4	202	9	13: 0	2.79E-16	3.00E-14	3.00E-14	TH	982.	196.	6.39E-07
12G	12.8	203	9	13: 0	1.78E-16	1.91E-14	1.91E-14	TH	1087	209.	5.09E-07
11G	14.3	203	9	13: 0	1.39E-16	1.49E-14	1.49E-14	TH	1196	221.	4.09E-07
10G	16.0	203	9	13: 0	1.09E-16	1.18E-14	1.18E-14	TH	1313	234.	3.33E-07
9G	17.7	203	9	13: 0	8.74E-17	9.40E-15	9.40E-15	TH	1435	247.	2.91E-07
8G	19.4	202	9	13: 0	7.46E-17	8.01E-15	8.01E-15	TH	1555	259.	2.58E-07
7G	21.1	202	9	13: 0	6.46E-17	6.94E-15	6.94E-15	TH	1674	271.	2.31E-07
6G	22.8	202	9	13: 0	5.63E-17	6.05E-15	6.05E-15	TH	1792	282.	2.09E-07
5G	24.5	201	9	13: 0	4.97E-17	5.34E-15	5.34E-15	TH	1908	292.	1.88E-07
4G	26.2	201	9	13: 0	4.32E-17	4.65E-15	4.65E-15	TH	2025	303.	1.70E-07
3G	27.9	200	9	13: 0	3.79E-17	4.07E-15	4.07E-15	TH	2142	313.	1.54E-07
2G	29.6	200	9	13: 0	3.32E-17	3.57E-15	3.57E-15	TH	2260	323.	1.40E-07
1G	31.3	200	9	13: 0	2.93E-17	3.15E-15	3.15E-15	TH	2852	0.0	9.76E-08
1G	40.0	199	9	15:38	2.03E-17	2.18E-15	2.18E-15	TH	3525	0.0	7.01E-08
1G	50.0	198	9	18:39	1.46E-17	1.57E-15	1.57E-15	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:04  
STABILITY CLASS D

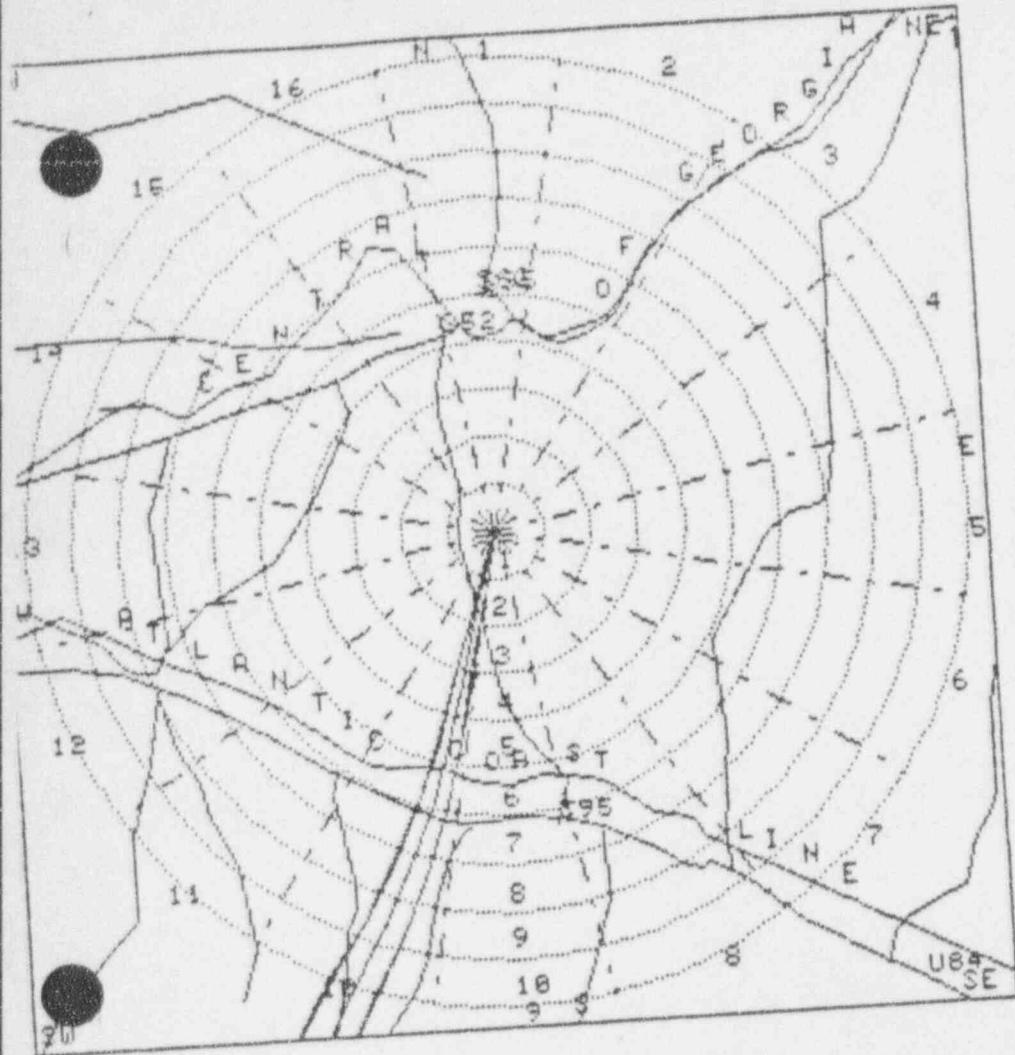
DATE: 83/01/19

ELEV: 3.3 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 13:00 ON 83/01/19  
ABBERViated PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z  
TIME WHOLE BODY THYROID DOSE RATE

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z	CHI/Q	
JULIAN DAY =	19										
20E	.8	196	9	13: 0	5.12E+02	2.20E+01	5.12E+02	WB	94.9	39.2	7.26E-06
20E	SB	196	9	13: 0	1.54E+02	6.66E+00	1.54E+02	WB	90.8	0.0	2.19E-06
19E	1.9	196	9	13: 0	3.90E+02	1.69E+01	3.90E+02	WB	188.	65.1	5.44E-06
18E	3.1	196	9	13: 0	3.38E+02	1.49E+01	3.38E+02	WB	292.	88.7	4.66E-06
18E	4.6	196	9	13: 0	1.84E+02	8.21E+00	1.84E+02	WB	408.	111.	2.52E-06
18E	6.0	196	9	13: 0	1.20E+02	5.42E+00	1.20E+02	WB	624.	147.	1.28E-06
18E	7.4	198	9	13: 0	9.16E+01	4.16E+00	9.16E+01	WB	726.	162.	1.03E-06
19E	8.7	199	9	13: 0	6.97E+01	3.20E+00	6.97E+01	WB	922.	188.	6.97E-07
13E	11.4	202	9	13: 0	4.09E+01	1.90E+00	4.09E+01	WB	1027	201.	5.51E-07
12E	12.8	203	9	13: 0	2.28E+01	1.07E+00	2.28E+01	TH	1137	214.	4.42E-07
11E	14.3	203	9	13: 0	4.76E+00	2.25E+01	2.25E+01	TH	1254	227.	3.57E-07
10E	16.0	203	9	13: 0	1.03E-01	2.94E-01	2.94E-01	TH	1376	241.	2.93E-07
9E	17.7	203	9	13: 0	8.15E-02	2.35E-01	2.35E-01	TH	1497	253.	2.64E-07
8E	19.4	202	9	13: 0	6.97E-02	2.02E-01	2.02E-01	TH	1617	265.	2.33E-07
7E	21.1	202	9	13: 0	5.83E-02	1.70E-01	1.70E-01	TH	1734	276.	2.10E-07
6E	22.8	202	9	13: 0	4.86E-02	1.43E-01	1.43E-01	TH	1851	287.	1.92E-07
5E	24.5	201	9	13: 0	4.05E-02	1.20E-01	1.20E-01	TH	1968	297.	1.73E-07
4E	26.2	201	9	13: 0	3.18E-02	9.49E-02	9.49E-02	TH	2085	308.	1.57E-07
7E	27.9	200	9	13: 0	2.38E-02	7.17E-02	7.17E-02	TH	2203	318.	1.43E-07
1E	29.6	200	9	13: 0	1.63E-02	4.93E-02	4.93E-02	TH	2322	327.	1.32E-07
1E	31.3	200	9	13: 0	4.49E-03	1.36E-02	1.36E-02	TH	2913	0.0	9.31E-08
1E	40.0	199	9	15:38	3.16E-03	9.61E-03	9.61E-03	TH	3586	0.0	6.75E-08
1E	50.0	198	9	18:39	2.29E-03	6.97E-03	6.97E-03	TH			



ACTUAL INCIDENT  
 FARLEY NUCLEAR PLANT  
 DATE: 83/01/14 -DAY- TIME: 13:05  
 ELEV: 3.3 MPH FROM 016 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 13:00

ROADS AND RAILROADS		STATUS
TOGGLE		
1.	FEDERAL ROADS	ON
2.	STATE ROADS	ON
3.	COUNTY ROADS	ON
4.	RAILROADS	ON
5.	ALL ON	
6.	ALL OFF	
7.	EXIT	

JINTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:19

STABILITY CLASS D

DATE: 03/01/19

ELEV: 2.5 MPH FROM 017 DEG

CURRENT PLUME INFORMATION AS OF 13:15 ON 03/01/19  
PRESENT LOCATION

ID	MILE	DEG	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN 2.14*SIGMA		CHI/Q			
					WHOLE BODY	THYROID	DOSE RATE ID	Y	Z			
JULIAN DAY =	19											
21G	.6	197	9	13:15	3.47E-14	3.85E-12	3.85E-12	TH	75.0	31.2	1.12E-04	
24G	SB	197	9	13:15	2.47E-14	2.74E-12	2.74E-12	TH	91.5	0.0	8.02E-05	
20G	1.4	197	9	13:15	9.57E-15	1.06E-12	1.06E-12	TH	132.	51.5	3.14E-05	
29G	2.5	196	9	13:15	3.60E-15	3.99E-13	3.99E-13	TH	205.	70.0	1.19E-05	
18G	3.7	196	9	13:15	1.63E-15	1.81E-13	1.81E-13	TH	291.	89.1	5.50E-06	
17G	5.2	196	9	13:15	8.42E-16	9.35E-14	9.35E-14	TH	390.	108.	2.88E-06	
16G	6.6	197	9	13:15	5.55E-16	6.16E-14	6.16E-14	TH	503.	128.	1.93E-06	
15G	8.0	198	9	13:15	4.04E-16	4.49E-14	4.49E-14	TH	716.	145.	1.42E-06	
14G	9.3	199	9	13:15	3.13E-16	3.48E-14	3.48E-14	TH	816.	175.	9.27E-07	
13G	12.0	202	9	13:15	2.53E-16	2.81E-14	2.81E-14	TH	1012	200.	6.09E-07	
12G	13.4	203	9	13:15	1.63E-16	1.81E-14	1.81E-14	TH	1115	212.	4.88E-07	
11G	14.9	203	9	13:15	1.28E-16	1.43E-14	1.43E-14	TH	1225	224.	3.94E-07	
10G	16.6	203	9	13:15	1.01E-16	1.13E-14	1.13E-14	TH	1341	237.	3.22E-07	
9G	18.3	203	9	13:15	8.14E-17	9.04E-15	9.04E-15	TH	1463	250.	2.82E-07	
8G	20.0	202	9	13:15	6.97E-17	7.74E-15	7.74E-15	TH	1583	262.	2.51E-07	
7G	21.7	202	9	13:15	6.05E-17	6.72E-15	6.72E-15	TH	1702	273.	2.25E-07	
6G	23.4	201	9	13:15	5.29E-17	5.87E-15	5.87E-15	TH	1820	284.	2.04E-07	
5G	25.1	201	9	13:15	4.67E-17	5.19E-15	5.19E-15	TH	1936	295.	1.83E-07	
4G	26.8	201	9	13:15	4.07E-17	4.52E-15	4.52E-15	TH	2052	305.	1.66E-07	
	28.5	200	9	13:15	3.58E-17	3.97E-15	3.97E-15	TH	2170	315.	1.51E-07	
	26	30.2	200	9	13:15	3.14E-17	3.48E-15	3.48E-15	TH	2287	325.	1.38E-07
	1C	31.9	200	9	13:15	2.77E-17	3.07E-15	3.07E-15	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:19

DATE: 03/01/19

STABILITY CLASS D

ELEV: 2.5 MPH FROM 017 DEG

CURRENT PLUME INFORMATION AS OF 13:15 ON 03/01/19

PRESENT LOCATION

ID	MILE	DEG	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN	2.14%SIGMA	CHI/Q
					WHOLE BODY	THYROID			
JULIAN DAY = 19									
21E .6 197 9 13:15	6.88E+01	3.08E+00	6.88E+01	WB	74.2	32.5	1.04E-06		
21E SB 197 9 13:15	1.71E+02	7.68E+00	1.71E+02	WB	90.9	0.0	2.60E-06		
20E 1.4 197 9 13:15	3.26E+02	1.47E+01	3.26E+02	WB	151.	55.6	4.86E-06		
19E 2.5 196 9 13:15	3.21E+02	1.47E+01	3.21E+02	WB	240.	77.4	4.73E-06		
18E 3.7 196 9 13:15	2.54E+02	1.17E+01	2.54E+02	WB	341.	98.8	3.69E-06		
17E 5.2 196 9 13:15	1.36E+02	6.35E+00	1.36E+02	WB	456.	119.	1.96E-06		
16E 6.6 197 9 13:15	9.90E+01	4.67E+00	9.90E+01	WB	565.	138.	1.42E-06		
15E 8.0 198 9 13:15	7.79E+01	3.71E+00	7.79E+01	WB	670.	154.	1.14E-06		
14E 9.3 199 9 13:15	6.01E+01	2.90E+00	6.01E+01	WB	771.	168.	9.41E-07		
13E 12.0 202 9 13:15	3.62E+01	1.76E+00	3.62E+01	WB	967.	194.	6.49E-07		
12E 13.4 203 9 13:15	2.03E+01	1.00E+00	2.03E+01	WB	1071	206.	5.17E-07		
11E 14.9 203 9 13:15	4.26E+00	2.11E+01	2.11E+01	TH	1181	219.	4.17E-07		
10E 16.6 203 9 13:15	9.27E-02	2.78E-01	2.78E-01	TH	1297	232.	3.39E-07		
9E 18.3 203 9 13:15	7.38E-02	2.23E-01	2.23E-01	TH	1420	245.	2.79E-07		
8E 20.0 202 9 13:15	6.24E-02	1.90E-01	1.90E-01	TH	1548	257.	2.49E-07		
7E 21.7 202 9 13:15	5.31E-02	1.63E-01	1.63E-01	TH	1659	269.	2.24E-07		
6E 23.4 201 9 13:15	4.44E-02	1.37E-01	1.37E-01	TH	1777	280.	2.03E-07		
5E 25.1 201 9 13:15	3.71E-02	1.15E-01	1.15E-01	TH	1893	291.	1.86E-07		
4E 26.8 201 9 13:15	2.92E-02	9.15E-02	9.15E-02	TH	2010	301.	1.67E-07		
3E 28.5 200 9 13:15	2.19E-02	6.93E-02	6.93E-02	TH	2127	311.	1.52E-07		
2E 30.2 200 9 13:15	1.51E-02	4.81E-02	4.81E-02	TH	2245	321.	1.40E-07		
1E 31.9 200 9 13:15	4.14E-03	1.32E-02	1.32E-02	TH	2364	331.	1.28E-07		

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:20

DATE: 83/01/19

STABILITY CLASS D

ELEV: 2.5 MPH FROM 017 DEG

CURRENT PLUME INFORMATION AS OF 13:15 ON 03/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY =	19										
21G	.6	197	9	13:15	3.47E-14	3.85E-12	3.85E-12	TH	75.0	34.2	1.12E-04
21G	SB	197	9	13:19	2.47E-14	2.74E-12	2.74E-12	TH	91.5	0.0	8.02E-05
20G	1.4	197	9	13:15	9.57E-15	1.06E-12	1.06E-12	TH	132.	51.5	3.14E-05
19G	2.5	196	9	13:15	3.60E-15	3.99E-13	3.99E-13	TH	205.	70.0	1.19E-05
18G	3.7	196	9	13:15	1.63E-15	1.81E-13	1.81E-13	TH	291.	89.1	5.50E-06
17G	5.2	196	9	13:15	8.42E-16	9.35E-14	9.35E-14	TH	390.	108.	2.88E-06
16G	6.6	197	9	13:15	5.55E-16	6.16E-14	6.16E-14	TH	503.	129.	1.93E-06
15G	8.0	198	9	13:15	4.04E-16	4.49E-14	4.49E-14	TH	611.	145.	1.42E-06
14G	9.3	199	9	13:15	3.13E-16	3.48E-14	3.48E-14	TH	716.	161.	1.12E-06
13G	12.0	202	9	13:15	2.53E-16	2.81E-14	2.81E-14	TH	816.	175.	9.27E-07
12G	13.4	203	9	13:15	1.63E-16	1.81E-14	1.81E-14	TH	1012	200.	6.09E-07
11G	14.9	203	9	13:15	1.28E-16	1.43E-14	1.43E-14	TH	1115	212.	4.88E-07
10G	16.6	203	9	13:15	1.01E-16	1.13E-14	1.13E-14	TH	1225	224.	3.94E-07
9G	18.3	203	9	13:15	8.14E-17	9.04E-15	9.04E-15	TH	1341	237.	3.22E-07
8G	20.0	202	9	13:15	6.97E-17	7.74E-15	7.74E-15	TH	1463	250.	2.82E-07
7G	21.7	202	9	13:15	6.05E-17	6.72E-15	6.72E-15	TH	1583	262.	2.51E-07
6G	23.4	201	9	13:15	5.29E-17	5.87E-15	5.87E-15	TH	1702	273.	2.25E-07
5G	25.1	201	9	13:15	4.67E-17	5.19E-15	5.19E-15	TH	1820	284.	2.04E-07
4G	26.8	201	9	13:15	4.07E-17	4.52E-15	4.52E-15	TH	1936	295.	1.83E-07
3G	28.5	200	9	13:15	3.58E-17	3.97E-15	3.97E-15	TH	2052	305.	1.66E-07
2G	30.2	200	9	13:15	3.14E-17	3.48E-15	3.48E-15	TH	2170	315.	1.51E-07
1G	31.9	200	9	13:15	2.77E-17	3.07E-15	3.07E-15	TH	2287	325.	1.38E-07
1G	40.0	199	9	16:32	1.97E-17	2.19E-15	2.19E-15	TH	2838	0.0	9.84E-08
1G	50.0	199	9	20:36	1.41E-17	1.57E-15	1.57E-15	TH	3511	0.0	7.06E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

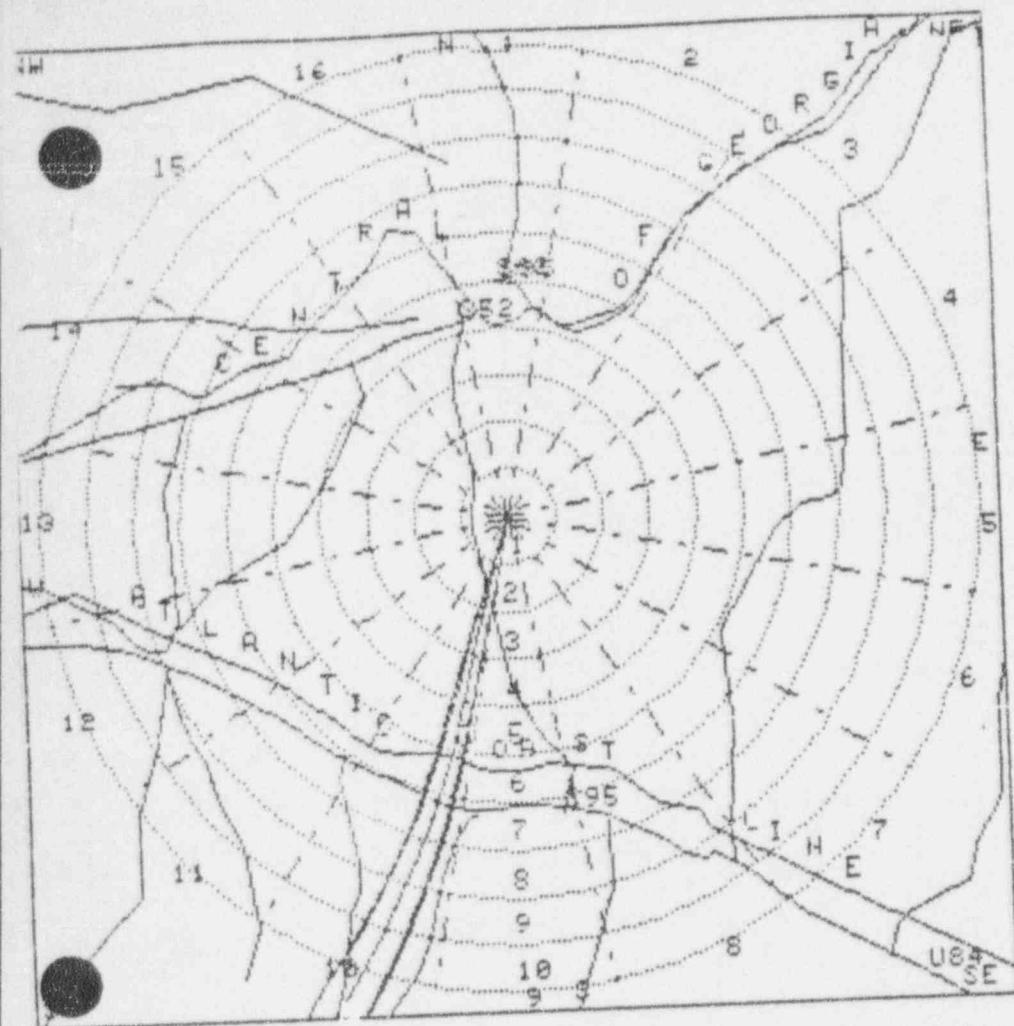
TIME: 13:20  
STABILITY CLASS D

DATE: 83/01/19

ELVU: 2.5 MPH FROM 017 DEG

CURRENT PLUME INFORMATION AS OF 13:15 ON 83/01/19  
ABBREVIATED PROJECTION

ID	MILE	DEG	SEC	TIME	DOSE RATE (MR/Hr)		HIGH DOSE ORGAN	2.14%SIGMA	CHI/Q
					WHOLE BODY	THYROID	DOSE RATE ID	Y	Z
JULIAN DAY =	19								
21E	.6	197	9	13:15	6.88E+01	3.08E+00	6.88E+01	WB	74.2
21E	5B	197	9	13:15	1.71E+02	7.68E+00	1.71E+02	WB	90.8
20E	1.4	197	9	13:15	3.26E+02	1.47E+01	3.26E+02	WB	151.
20E	2.5	196	9	13:15	3.21E+02	1.47E+01	3.21E+02	WB	240.
18E	3.7	196	9	13:15	2.54E+02	1.17E+01	2.54E+02	WB	341.
18E	5.2	196	9	13:15	1.36E+02	6.35E+00	1.36E+02	WB	456.
18E	6.6	197	9	13:15	9.90E+01	4.67E+00	9.90E+01	WB	565.
18E	8.0	198	9	13:15	7.79E+01	3.71E+00	7.79E+01	WB	670.
18E	9.3	199	9	13:15	6.01E+01	2.90E+00	6.01E+01	WB	771.
18E	12.0	202	9	13:15	3.62E+01	1.76E+00	3.62E+01	WB	967.
12E	13.4	203	9	13:15	2.03E+01	1.00E+00	2.03E+01	WB	1071
11E	14.9	203	9	13:15	4.26E+00	2.11E+01	2.11E+01	TH	1181
10E	16.6	203	9	13:15	9.27E-02	2.78E-01	2.78E-01	TH	1297
9E	18.3	203	9	13:15	7.38E-02	2.23E-01	2.23E-01	TH	1420
8E	20.0	202	9	13:15	6.24E-02	1.90E-01	1.90E-01	TH	1540
7E	21.7	202	9	13:15	5.31E-02	1.63E-01	1.63E-01	TH	1659
6E	23.4	201	9	13:15	4.44E-02	1.37E-01	1.37E-01	TH	1777
5E	25.1	201	9	13:15	3.71E-02	1.15E-01	1.15E-01	TH	1893
4E	26.8	201	9	13:15	2.92E-02	9.15E-02	9.15E-02	TH	2010
	28.5	200	9	13:15	2.19E-02	6.93E-02	6.93E-02	TH	2127
2E	30.2	200	9	13:15	1.51E-02	4.81E-02	4.81E-02	TH	2245
1E	31.9	200	9	13:15	4.14E-03	1.32E-02	1.32E-02	TH	2364
1E	40.0	199	9	16:32	2.99E-03	9.57E-03	9.57E-03	TH	2913
1E	50.0	199	9	20:36	2.17E-03	6.94E-03	6.94E-03	TH	3586



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT  
DATE: 83/01/14 -DAY- TIME: 13:21  
ELEV: 2.5 MPH FROP 017 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 13:15

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

JINTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME 13:34  
STABILITY CLASS D

DATE: 83/01/19

ELEV: 3.9 MPH FROM 021 DEG

CURRENT PLUME INFORMATION AS OF 13:30 ON 83/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	TH	Y	Z	
JULIAN DAY =	19										
22G	1.0	201	9	13:30	1.11E-14	1.30E-12	1.30E-12	TH	108.	44.6	3.72E-05
22G	SB	201	9	13:30	1.53E-14	1.76E-12	1.76E-12	TH	91.5	0.0	5.10E-05
21G	1.6	200	9	13:30	6.55E-15	7.51E-13	7.51E-13	TH	194.	67.5	2.20E-05
20G	2.4	199	9	13:30	3.22E-15	3.69E-13	3.69E-13	TH	246.	79.5	1.09E-05
19G	3.4	198	9	13:30	1.69E-15	1.94E-13	1.94E-13	TH	314.	93.8	5.84E-06
18G	4.7	197	9	13:30	9.39E-16	1.07E-13	1.07E-13	TH	396.	109.	3.28E-06
17G	6.1	197	9	13:30	5.52E-16	6.33E-14	6.33E-14	TH	493.	126.	1.96E-06
16G	7.6	197	9	13:30	3.97E-16	4.55E-14	4.55E-14	TH	603.	144.	1.43E-06
15G	9.0	198	9	13:30	3.05E-16	3.50E-14	3.50E-14	TH	710.	160.	1.11E-06
14G	10.3	199	9	13:30	2.46E-16	2.82E-14	2.82E-14	TH	813.	174.	9.45E-07
13G	12.9	202	9	13:30	2.04E-16	2.34E-14	2.34E-14	TH	913.	187.	7.73E-07
12G	14.4	203	9	13:30	1.36E-16	1.56E-14	1.56E-14	TH	1107	211.	5.27E-07
11G	15.9	203	9	13:30	1.09E-16	1.25E-14	1.25E-14	TH	1209	223.	4.29E-07
10G	17.5	203	9	13:30	8.73E-17	1.00E-14	1.00E-14	TH	1318	235.	3.50E-07
9G	19.3	203	9	13:30	7.06E-17	8.09E-15	8.09E-15	TH	1434	247.	2.89E-07
8G	21.0	202	9	13:30	6.10E-17	6.99E-15	6.99E-15	TH	1555	259.	2.56E-07
7G	22.7	202	9	13:30	5.34E-17	6.12E-15	6.12E-15	TH	1675	271.	2.29E-07
6G	24.4	201	9	13:30	4.70E-17	5.38E-15	5.38E-15	TH	1794	282.	2.07E-07
5G	26.1	201	9	13:30	4.17E-17	4.78E-15	4.78E-15	TH	1911	293.	1.89E-07
27.7	201	9	13:30	3.66E-17	4.19E-15	4.19E-15	TH	2027	303.	1.71E-07	
3G	29.4	200	9	13:30	3.22E-17	3.69E-15	3.69E-15	TH	2143	313.	1.55E-07
2G	31.1	200	9	13:30	2.84E-17	3.25E-15	3.25E-15	TH	2260	323.	1.41E-07
1G	32.9	200	9	13:30	2.51E-17	2.88E-15	2.88E-15	TH	2378	332.	1.29E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:34

DATE: 03/01/19

STABILITY CLASS D

ELEV: 3.9 MPH FROM 021 DEG

CURRENT PLUME INFORMATION AS OF 13:30 ON 03/01/19  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CHI/Q

ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY = 19											
22E	1.0	201	9	13:30	6.15E+02	2.86E+01	6.15E+02	WB	108.	43.3	1.00E-05
23E	SB	201	9	13:30	1.98E+02	9.24E+00	1.98E+02	WB	90.8	0.0	3.24E-06
24E	1.6	200	9	13:30	2.24E+02	1.05E+01	2.24E+02	WB	163.	58.9	3.58E-06
25E	2.4	199	9	13:30	3.16E+02	1.50E+01	3.16E+02	WB	234.	76.1	4.97E-06
26E	3.4	198	9	13:30	3.02E+02	1.45E+01	3.02E+02	WB	319.	94.3	4.69E-06
27E	4.7	197	9	13:30	1.85E+02	8.98E+00	1.85E+02	WB	418.	113.	2.83E-06
28E	6.1	197	9	13:30	1.01E+02	4.96E+00	1.01E+02	WB	530.	132.	1.53E-06
29E	7.6	197	9	13:30	8.00E+01	3.96E+00	8.00E+01	WB	638.	149.	1.21E-06
30E	9.0	198	9	13:30	6.31E+01	3.16E+00	6.31E+01	WB	742.	164.	9.80E-07
31E	10.3	199	9	13:30	4.75E+01	2.40E+00	4.75E+01	WB	842.	178.	7.83E-07
32E	12.9	202	9	13:30	3.09E+01	1.58E+00	3.09E+01	WB	1037	202.	5.83E-07
33E	14.4	203	9	13:30	1.75E+01	9.09E-01	1.75E+01	WB	1101	215.	4.69E-07
34E	15.9	203	9	13:30	3.71E+00	1.93E+01	1.93E+01	TH	1250	227.	3.83E-07
35E	17.5	203	9	13:30	8.14E-02	2.56E-01	2.56E-01	TH	1366	239.	3.13E-07
36E	19.3	203	9	13:30	6.52E-02	2.07E-01	2.07E-01	TH	1488	252.	2.60E-07
37E	21.0	202	9	13:30	5.54E-02	1.77E-01	1.77E-01	TH	1608	264.	2.33E-07
38E	22.7	202	9	13:30	4.74E-02	1.52E-01	1.52E-01	TH	1727	275.	2.11E-07
39E	24.4	201	9	13:30	3.98E-02	1.29E-01	1.29E-01	TH	1814	286.	1.91E-07
40E	26.1	201	9	13:30	3.34E-02	1.09E-01	1.09E-01	TH	1960	297.	1.76E-07
41E	27.7	201	9	13:30	2.64E-02	8.67E-02	8.67E-02	TH	2077	307.	1.59E-07
42E	29.4	200	9	13:30	1.99E-02	6.58E-02	6.58E-02	TH	2194	317.	1.45E-07
43E	31.1	200	9	13:30	1.37E-02	4.58E-02	4.58E-02	TH	2311	327.	1.34E-07
44E	32.9	200	9	13:30	3.77E-03	1.26E-02	1.26E-02	TH	2430	336.	1.23E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:34

DATE: 03/01/19

STABILITY CLASS D

ELEV: 3.9 MPH FROM 021 DEG

CURRENT PLUME INFORMATION AS OF 13:30 ON 03/01/19  
ABBREVIATED PROJECTION

	DOSE RATE (MR/HR)				HIGH DOSE ORGAN 2.14%SIGMA	CHI/Q			
ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z

JULIAN DAY = 19										
22G	1.0	201	9	13:30	1.14E-14	1.30E-12	1.30E-12	TH 108.	44.6	3.79E-05
22G	SB	201	9	13:30	1.53E-14	1.76E-12	1.76E-12	TH 91.5	0.0	5.10E-05
22G	1.6	200	9	13:30	6.55E-15	7.51E-13	7.51E-13	TH 194.	67.5	2.20E-05
22G	2.4	199	9	13:30	3.22E-15	3.69E-13	3.69E-13	TH 246.	79.5	1.09E-05
22G	3.4	198	9	13:30	1.69E-15	1.94E-13	1.94E-13	TH 314.	93.8	5.84E-06
18G	4.7	197	9	13:30	9.39E-16	1.07E-13	1.07E-13	TH 396.	109.	3.28E-06
18G	6.1	197	9	13:30	5.52E-16	6.33E-14	6.33E-14	TH 493.	126.	1.96E-06
16G	7.6	197	9	13:30	3.97E-16	4.55E-14	4.55E-14	TH 603.	144.	1.43E-06
15G	9.0	198	9	13:30	3.05E-16	3.50E-14	3.50E-14	TH 710.	160.	1.11E-06
19G	10.3	199	9	13:30	2.46E-16	2.82E-14	2.82E-14	TH 813.	174.	9.15E-07
13G	12.9	202	9	13:30	2.04E-16	2.34E-14	2.34E-14	TH 913.	187.	7.73E-07
12G	14.4	203	9	13:30	1.36E-16	1.56E-14	1.56E-14	TH 1107.	211.	5.27E-07
11G	15.9	203	9	13:30	1.09E-16	1.25E-14	1.25E-14	TH 1209	223.	4.29E-07
10G	17.5	203	9	13:30	8.73E-17	1.00E-14	1.00E-14	TH 1319	235.	3.50E-07
9G	19.3	203	9	13:30	7.06E-17	8.09E-15	8.09E-15	TH 1434	247.	2.89E-07
8G	21.0	202	9	13:30	6.10E-17	6.99E-15	6.99E-15	TH 1555	259.	2.56E-07
7G	22.7	202	9	13:30	5.34E-17	6.12E-15	6.12E-15	TH 1675	271.	2.29E-07
6G	24.4	201	9	13:30	4.70E-17	5.38E-15	5.38E-15	TH 1794	282.	2.07E-07
5G	26.1	201	9	13:30	4.17E-17	4.78E-15	4.78E-15	TH 1911	293.	1.89E-07
4G	27.7	201	9	13:30	3.66E-17	4.19E-15	4.19E-15	TH 2027	303.	1.71E-07
3G	29.4	200	9	13:30	3.22E-17	3.69E-15	3.69E-15	TH 2143	313.	1.55E-07
2G	31.1	200	9	13:30	2.84E-17	3.25E-15	3.25E-15	TH 2260	323.	1.41E-07
1G	32.9	200	9	13:30	2.51E-17	2.88E-15	2.88E-15	TH 2378	332.	1.29E-07
1G	40.0	200	9	15:20	1.88E-17	2.15E-15	2.15E-15	TH 2861	0.0	9.71E-08
1G	50.0	200	9	17:56	1.35E-17	1.55E-15	1.55E-15	TH 3535	0.0	6.98E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:35

DATE: 03/01/19

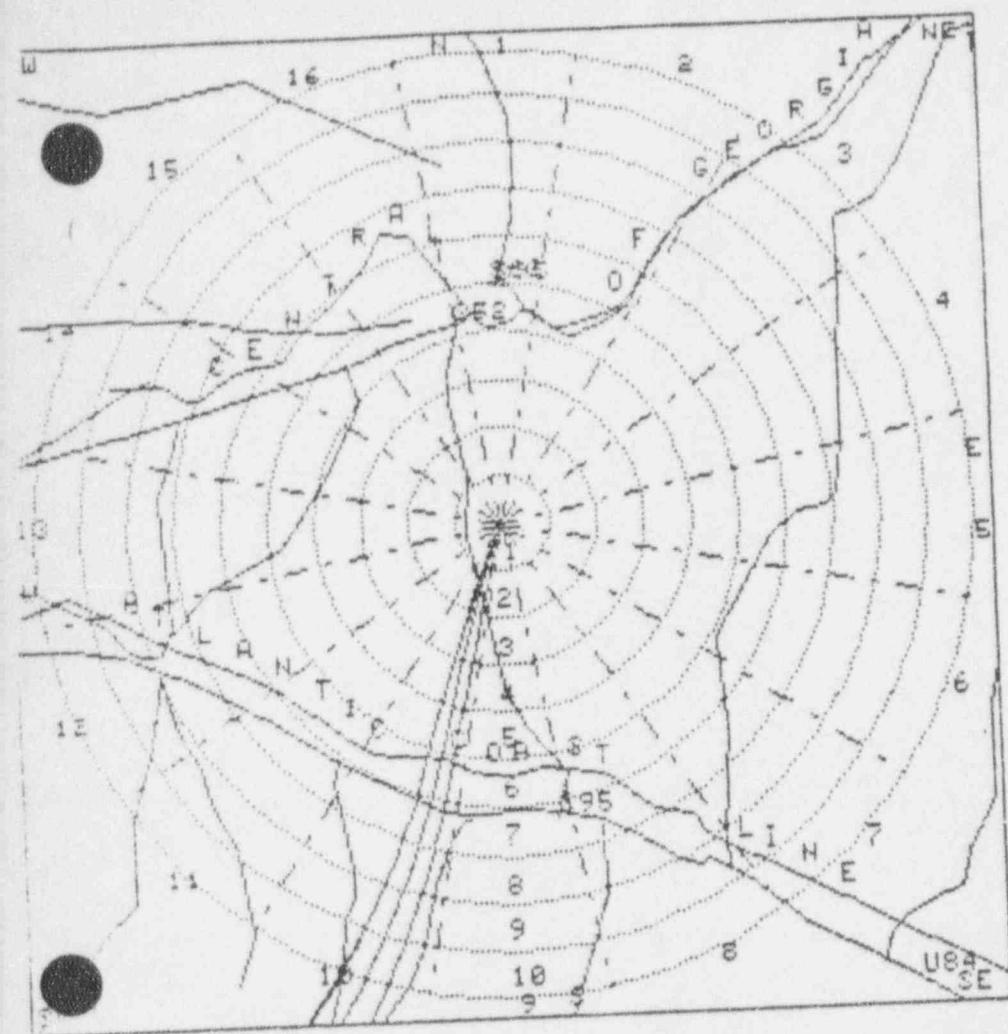
STABILITY CLASS D

ELEV: 3.9 MPH FROM 021 DEG

CURRENT PLUME INFORMATION AS OF 13:30 ON 03/01/19  
ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	WB	TH	Y	Z
JULIAN DAY =	19										
22E	1.0	201	9	13:30	6.15E+02	2.86E+01	6.15E+02	WB	103.	43.3	1.00E-05
23E	SB	201	9	13:30	1.98E+02	9.24E+00	1.98E+02	WB	90.8	0.0	3.24E-06
24E	1.6	200	9	13:30	2.24E+02	1.05E+01	2.24E+02	WB	163.	58.9	3.58E-06
25E	2.4	199	9	13:30	3.16E+02	1.50E+01	3.16E+02	WB	231.	76.1	4.97E-06
26E	3.4	198	9	13:30	3.02E+02	1.45E+01	3.02E+02	WB	319.	94.3	4.69E-06
18E	4.7	197	9	13:30	1.85E+02	8.98E+00	1.85E+02	WB	418.	113.	2.83E-06
19E	6.1	197	9	13:30	1.01E+02	4.96E+00	1.01E+02	WB	530.	132.	1.53E-06
16E	7.6	197	9	13:30	8.00E+01	3.96E+00	8.00E+01	WB	638.	149.	1.21E-06
15E	9.0	198	9	13:30	6.31E+01	3.16E+00	6.31E+01	WB	742.	164.	9.80E-07
14E	10.3	199	9	13:30	4.75E+01	2.40E+00	4.75E+01	WB	842.	178.	7.83E-07
13E	12.9	202	9	13:30	3.09E+01	1.58E+00	3.09E+01	WB	1037	202.	5.83E-07
12E	14.4	203	9	13:30	1.75E+01	9.09E-01	1.75E+01	WB	1141	215.	4.69E-07
11E	15.9	203	9	13:30	3.71E+00	1.93E+01	1.93E+01	TH	1250	227.	3.83E-07
10E	17.5	203	9	13:30	8.14E-02	2.56E-01	2.56E-01	TH	1366	239.	3.13E-07
9E	19.3	203	9	13:30	6.52E-02	2.07E-01	2.07E-01	TH	1488	252.	2.60E-07
8E	21.0	202	9	13:30	5.54E-02	1.77E-01	1.77E-01	TH	1608	264.	2.33E-07
7E	22.7	202	9	13:30	4.74E-02	1.52E-01	1.52E-01	TH	1727	275.	2.11E-07
6E	24.4	201	9	13:30	3.98E-02	1.29E-01	1.29E-01	TH	1844	286.	1.91E-07
5E	26.1	201	9	13:30	3.34E-02	1.09E-01	1.09E-01	TH	1960	297.	1.76E-07
4E	27.7	201	9	13:30	2.64E-02	8.67E-02	8.67E-02	TH	2077	307.	1.59E-07
3E	29.4	200	9	13:30	1.99E-02	6.58E-02	6.58E-02	TH	2194	317.	1.45E-07
2E	31.1	200	9	13:30	1.37E-02	4.58E-02	4.58E-02	TH	2311	327.	1.34E-07
1E	32.9	200	9	13:30	3.77E-03	1.26E-02	1.26E-02	TH	2430	336.	1.23E-07
1E	40.0	200	9	15:20	2.84E-03	9.53E-03	9.53E-03	TH	2913	0.0	9.31E-08
1E	50.0	200	9	17:56	2.06E-03	6.91E-03	6.91E-03	TH	3586	0.0	6.75E-08



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT  
DATE: 83/01/14 -DAY- TIME: 13:36  
ELEV: 3.9 MPH FROM 021 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 13:30

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 13:49  
STABILITY CLASS D

DATE: 83/01/19

ELEV: 4.0 MPH FROM 025 DEG

CURRENT PLUME INFORMATION AS OF 13:45 ON 83/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z		
JULIAN DAY = 19											
230	1.0	206	9	13:45	1.01E-14	1.19E-12	1.19E-12	TH	112.	45.7	3.44E-05
230	SB	206	9	13:45	1.44E-14	1.70E-12	1.70E-12	TH	91.5	0.0	4.90E-05
220	2.0	203	9	13:45	3.84E-15	4.54E-13	4.54E-13	TH	201.	69.1	1.32E-05
210	2.6	202	9	13:45	3.38E-15	3.99E-13	3.99E-13	TH	281.	87.1	1.17E-05
200	3.4	201	9	13:45	1.89E-15	2.23E-13	2.23E-13	TH	331.	97.3	6.66E-06
190	4.4	200	9	13:45	1.10E-15	1.30E-13	1.30E-13	TH	397.	109.	3.94E-06
180	5.7	199	9	13:45	6.65E-16	7.86E-14	7.86E-14	TH	477.	124.	2.40E-06
190	7.1	198	9	13:45	4.16E-16	4.92E-14	4.92E-14	TH	572.	139.	1.53E-06
180	8.6	198	9	13:45	3.14E-16	3.71E-14	3.71E-14	TH	681.	156.	1.17E-06
150	10.0	199	9	13:45	2.49E-16	2.95E-14	2.95E-14	TH	787.	171.	9.45E-07
140	11.3	200	9	13:45	2.05E-16	2.42E-14	2.42E-14	TH	889.	184.	7.91E-07
130	13.9	202	9	13:45	1.73E-16	2.05E-14	2.05E-14	TH	1181	219.	4.75E-07
120	15.4	203	9	13:45	1.19E-16	1.40E-14	1.40E-14	TH	1281	231.	3.89E-07
110	16.9	203	9	13:45	9.58E-17	1.13E-14	1.13E-14	TH	1392	242.	3.21E-07
100	18.6	203	9	13:45	7.73E-17	9.14E-15	9.14E-15	TH	1507	254.	2.67E-07
90	20.3	203	9	13:45	6.30E-17	7.44E-15	7.44E-15	TH	1628	266.	2.38E-07
80	22.0	202	9	13:45	5.48E-17	6.47E-15	6.47E-15	TH	1748	278.	2.14E-07
70	23.7	202	9	13:45	4.82E-17	5.70E-15	5.70E-15	TH	1866	289.	1.94E-07
60	25.4	202	9	13:45	4.26E-17	5.04E-15	5.04E-15	TH	1983	299.	1.78E-07
50	27.1	201	9	13:45	3.80E-17	4.49E-15	4.49E-15	TH	2099	309.	1.61E-07
40	28.7	201	9	13:45	3.34E-17	3.95E-15	3.95E-15	TH	2215	319.	1.47E-07
30	30.4	201	9	13:45	2.96E-17	3.49E-15	3.49E-15	TH	2331	328.	1.34E-07
20	32.1	200	9	13:45	2.61E-17	3.09E-15	3.09E-15	TH	2449	338.	1.24E-07
10	33.9	200	9	13:45	2.32E-17	2.74E-15	2.74E-15	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:49  
STABILITY CLASS D

DATE: 03/01/19

ELEV: 4.0 MPH FROM 025 DEG

CURRENT PLUME INFORMATION AS OF 13:45 ON 03/01/19

PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	WB	111	41.4	4.38E-06
JULIAN DAY = 19											
23E	1.0	206	9	13:45	2.50E+02	1.21E+01	2.50E+02	WB	90.8	0.0	3.51E-06
23E	SB	206	9	13:45	2.00E+02	9.70E+00	2.00E+02	WB	197	67.4	5.35E-06
22E	2.0	203	9	13:45	3.11E+02	1.51E+01	3.11E+02	WB	249	79.5	4.55E-06
22E	2.6	202	9	13:45	2.70E+02	1.33E+01	2.70E+02	WB	317	93.8	5.44E-06
20E	3.4	201	9	13:45	3.28E+02	1.63E+01	3.28E+02	WB	399	109	3.66E-06
29E	4.4	200	9	13:45	2.24E+02	1.13E+01	2.24E+02	WB	496	126	2.01E-06
18E	5.7	199	9	13:45	1.25E+02	6.36E+00	1.25E+02	WB	606	144	1.28E-06
17E	7.1	198	9	13:45	6.40E+01	3.32E+00	6.40E+01	WB	713	160	1.02E-06
16E	8.6	198	9	13:45	5.17E+01	2.71E+00	5.17E+01	WB	816	174	8.45E-07
15E	10.0	199	9	13:45	5.17E+01	2.11E+00	3.98E+01	WR	916	187	6.90E-07
14E	11.3	200	9	13:45	3.98E+01	1.42E+00	2.65E+01	WB	1109	211	5.27E-07
13E	13.9	202	9	13:45	2.65E+01	1.51E+01	1.51E+01	WB	1212	223	4.28E-07
12E	15.4	203	9	13:45	1.51E+01	8.25E-01	1.77E+01	TH	1321	235	3.51E-07
11E	16.9	203	9	13:45	3.20E+00	1.77E+01	1.77E+01	TH	1437	247	2.90E-07
10E	18.6	203	9	13:45	7.15E-02	2.36E-01	2.36E-01	TH	1558	259	2.38E-07
9E	20.3	203	9	13:45	5.67E-02	1.88E-01	1.88E-01	TH	1678	271	2.18E-07
8E	22.0	202	9	13:45	4.93E-02	1.65E-01	1.65E-01	TH	1797	282	1.98E-07
7E	23.7	202	9	13:45	4.24E-02	1.43E-01	1.43E-01	TH	1914	293	1.81E-07
6E	25.4	202	9	13:45	3.57E-02	1.21E-01	1.21E-01	TH	2029	303	1.67E-07
5E	27.1	201	9	13:45	3.01E-02	1.03E-01	1.03E-01	TH	2146	313	1.51E-07
4E	28.7	201	9	13:45	2.38E-02	8.21E-02	8.21E-02	TH	2263	323	1.40E-07
3E	30.4	201	9	13:45	1.81E-02	6.30E-02	6.30E-02	TH	2380	332	1.28E-07
2E	32.1	200	9	13:45	1.25E-02	4.36E-02	4.36E-02	TH	2498	341	1.18E-07
1E	33.9	200	9	13:45	3.43E-03	1.20E-02	1.20E-02	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 13:50  
STABILITY CLASS D

DATE: 03/01/19

ELEV: 4.0 MPH FROM 025 DEG

CURRENT PLUME INFORMATION AS OF 13:45 ON 03/01/19  
ABBREVIATED PROJECTION

ID	MILE	DEC SEC	TIME	DOSE RATE (MR/HR)			HIGH DOSE ORGAN 2.14%SIGMA CHI/Q		
				WHOLE BODY	THYROID	DOSE RATE ID	Y	Z	
JULIAN DAY =	19								
23G	1.0	206	9 13:45	1.01E-14	1.19E-12	1.19E-12	TH 112.	45.7	3.44E-05
23G	SB	206	9 13:45	1.44E-14	1.70E-12	1.70E-12	TH 91.5	0.0	4.90E-05
22G	2.0	203	9 13:45	3.84E-15	4.54E-13	4.54E-13	TH 201.	69.1	1.32E-05
21G	2.6	202	9 13:45	3.38E-15	3.99E-13	3.99E-13	TH 281.	87.1	1.17E-05
20G	3.4	201	9 13:45	1.89E-15	2.23E-13	2.23E-13	TH 331.	97.3	6.66E-06
29G	4.4	200	9 13:45	1.10E-15	1.30E-13	1.30E-13	TH 397.	109.	3.94E-06
18G	5.7	199	9 13:45	6.65E-16	7.86E-14	7.86E-14	TH 477.	124.	2.40E-06
18G	7.1	198	9 13:45	4.16E-16	4.92E-14	4.92E-14	TH 572.	139.	1.53E-06
16G	8.6	198	9 13:45	3.14E-16	3.71E-14	3.71E-14	TH 681.	156.	1.17E-06
15G	10.0	199	9 13:45	2.49E-16	2.95E-14	2.95E-14	TH 787.	171.	9.45E-07
14G	11.3	200	9 13:45	2.05E-16	2.42E-14	2.42E-14	TH 889.	184.	7.91E-07
13G	13.9	202	9 13:45	1.73E-16	2.05E-14	2.05E-14	TH 989.	197.	6.80E-07
12G	15.4	203	9 13:45	1.19E-16	1.40E-14	1.40E-14	TH 1181	219.	4.75E-07
11G	16.9	203	9 13:45	9.58E-17	1.13E-14	1.13E-14	TH 1281	231.	3.89E-07
10G	18.6	203	9 13:45	7.73E-17	9.14E-15	9.14E-15	TH 1392	242.	3.21E-07
9G	20.3	203	9 13:45	6.30E-17	7.44E-15	7.44E-15	TH 1507	254.	2.67E-07
8G	22.0	202	9 13:45	5.48E-17	6.47E-15	6.47E-15	TH 1628	266.	2.38E-07
7G	23.7	202	9 13:45	4.82E-17	5.70E-15	5.70E-15	TH 1748	278.	2.14E-07
6G	25.4	202	9 13:45	4.26E-17	5.04E-15	5.04E-15	TH 1866	289.	1.94E-07
5G	27.1	201	9 13:45	3.80E-17	4.49E-15	4.49E-15	TH 1983	299.	1.78E-07
4G	28.7	201	9 13:45	3.34E-17	3.95E-15	3.95E-15	TH 2099	309.	1.61E-07
3G	30.4	201	9 13:45	2.96E-17	3.49E-15	3.49E-15	TH 2215	319.	1.47E-07
2G	32.1	200	9 13:45	2.61E-17	3.09E-15	3.09E-15	TH 2331	328.	1.34E-07
1G	33.9	200	9 13:45	2.32E-17	2.74E-15	2.74E-15	TH 2449	338.	1.24E-07
1G	40.0	201	9 15:17	1.81E-17	2.14E-15	2.14E-15	TH 2866	0.0	9.68E-08
1G	50.0	202	9 17:46	1.30E-17	1.54E-15	1.54E-15	TH 3541	0.0	6.96E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 13:50

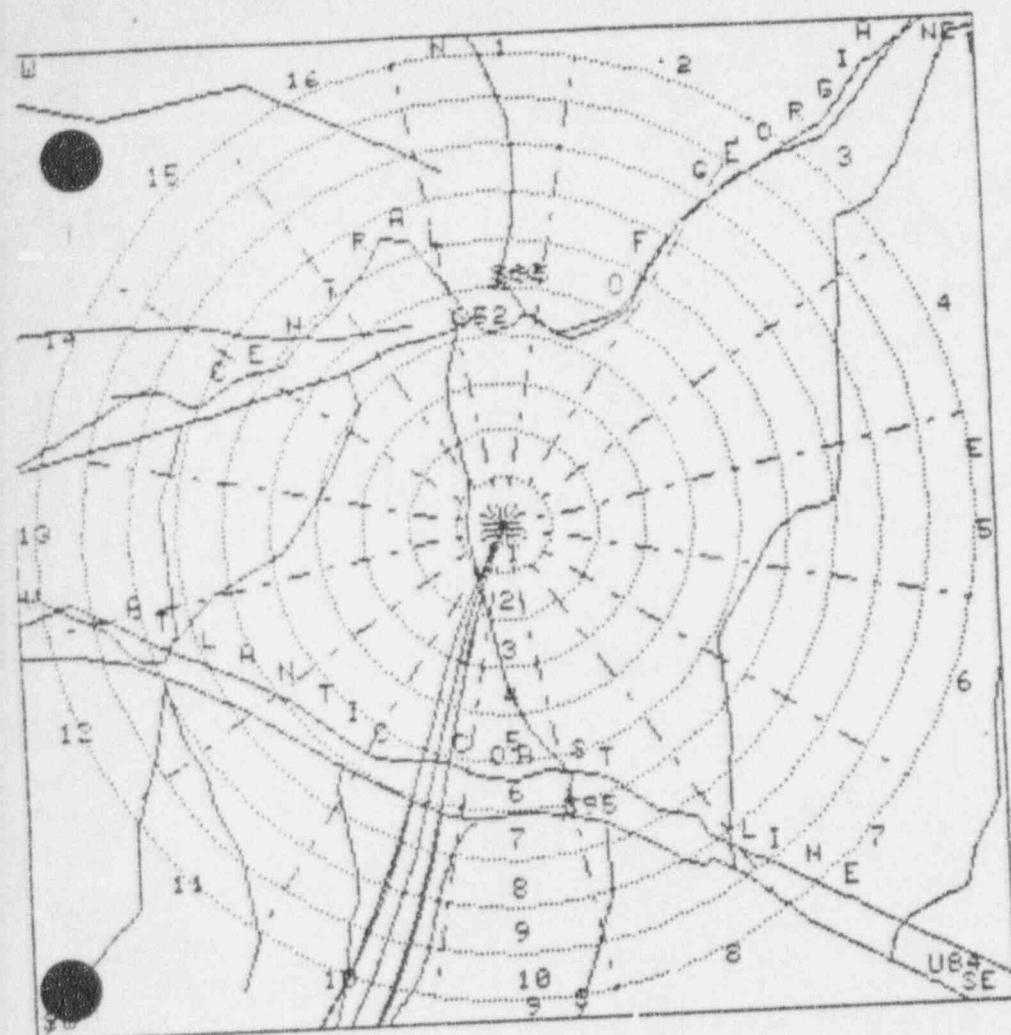
DATE: 83/01/19

ELEV: 4.0 MPH FROM 025 DEG

STABILITY CLASS D

CURRENT PLUME INFORMATION AS OF 13:45 ON 83/01/19  
ABBRIVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	WB	TH	Y	Z
JULIAN DAY = 19											
23E	1.0	206	9	13:45	2.50E+02	1.21E+01	2.50E+02	WB	111.	44.4	4.38E-06
23E	5B	206	9	13:45	2.00E+02	9.70E+00	2.00E+02	WB	90.8	0.0	3.51E-06
23E	2.0	203	9	13:45	3.11E+02	1.51E+01	3.11E+02	WB	197.	67.4	5.35E-06
21E	2.6	202	9	13:45	2.70E+02	1.33E+01	2.70E+02	WB	249.	79.5	4.55E-06
20E	3.4	201	9	13:45	3.28E+02	1.63E+01	3.28E+02	WB	317.	93.8	5.44E-06
19E	4.4	200	9	13:45	2.24E+02	1.13E+01	2.24E+02	WB	399.	109.	3.66E-06
18E	5.7	199	9	13:45	1.25E+02	6.36E+00	1.25E+02	WB	496.	126.	2.01E-06
18E	7.1	198	9	13:45	8.06E+01	4.14E+00	8.06E+01	WB	606.	144.	1.28E-06
17E	8.6	198	9	13:45	6.40E+01	3.32E+00	6.40E+01	WB	713.	160.	1.02E-06
16E	10.0	199	9	13:45	5.17E+01	2.71E+00	5.17E+01	WB	816.	174.	8.45E-07
16E	11.3	200	9	13:45	3.98E+01	2.11E+00	3.98E+01	WB	916.	187.	6.90E-07
13E	13.9	202	9	13:45	2.65E+01	1.42E+00	2.65E+01	WB	1109	211.	5.27E-07
12E	15.4	203	9	13:45	1.51E+01	8.25E-01	1.51E+01	WB	1212	223.	4.28E-07
11E	16.9	203	9	13:45	3.24E+00	1.77E+01	1.77E+01	TH	1321	235.	3.51E-07
10E	18.6	203	9	13:45	7.15E-02	2.36E-01	2.36E-01	TH	1437	247.	2.90E-07
9E	20.3	203	9	13:45	5.67E-02	1.88E-01	1.88E-01	TH	1558	259.	2.38E-07
8E	22.0	202	9	13:45	4.93E-02	1.65E-01	1.65E-01	TH	1678	271.	2.18E-07
7E	23.7	202	9	13:45	4.24E-02	1.43E-01	1.43E-01	TH	1797	282.	1.90E-07
6E	25.4	202	9	13:45	3.57E-02	1.21E-01	1.21E-01	TH	1914	293.	1.81E-07
5E	27.1	201	9	13:45	3.01E-02	1.03E-01	1.03E-01	TH	2029	303.	1.67E-07
4E	28.7	201	9	13:45	2.38E-02	8.21E-02	8.21E-02	TH	2146	313.	1.51E-07
3E	30.4	201	9	13:45	1.81E-02	6.30E-02	6.30E-02	TH	2263	323.	1.40E-07
2E	32.1	200	9	13:45	1.25E-02	4.36E-02	4.36E-02	TH	2380	332.	1.28E-07
1E	33.9	200	9	13:45	3.43E-03	1.20E-02	1.20E-02	TH	2498	341.	1.18E-07
1E	40.0	201	9	15:17	2.70E-03	9.49E-03	9.49E-03	TH	2915	0.0	9.30E-08
1E	50.0	202	9	17:46	1.96E-03	6.88E-03	6.88E-03	TH	3590	0.0	6.74E-08



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT  
DATE: 83/01/14 -DAY- TIME: 13:51  
ELEV: 4.0 MPH FROM 025 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 13:45

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

JINTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 14:05

STABILITY CLASS D

DATE: 03/01/17

ELEV: 4.6 MPH FROM 029 DEG

CURRENT PLUME INFORMATION AS OF 14:00 ON 03/01/17  
PRESENT LOCATION

ID	MILE	DEC SEC	TIME	DOSE RATE (MR/HR)			HIGH DOSE ORGAN	SIGMA	CHI/R
				WHOLE BODY	THYROID	DOSE RATE ID			

JULIAN DAY =	19								
24G	1.1	210	9 14: 0	7.22E-15	8.79E-13	8.79E-13	TH 125.	49.4	2.51E-05
24G	SB	210	9 14: 0	1.23E-14	1.50E-12	1.50E-12	TH 91.5	0.0	4.30E-05
23G	2.2	208	9 14: 0	2.99E-15	3.64E-13	3.64E-13	TH 224.	74.6	1.05E-05
22G	3.1	206	9 14: 0	1.81E-15	2.21E-13	2.21E-13	TH 307.	92.5	6.46E-06
21G	3.7	204	9 14: 0	1.94E-15	2.36E-13	2.36E-13	TH 384.	107.	6.99E-06
20G	4.5	203	9 14: 0	1.17E-15	1.42E-13	1.42E-13	TH 433.	116.	4.27E-06
19G	5.6	202	9 14: 0	7.36E-16	8.96E-14	8.96E-14	TH 575.	140.	1.77E-06
18G	6.8	200	9 14: 0	1.72E-16	5.75E-14	5.75E-14	TH 669.	154.	1.18E-06
17G	8.3	200	9 14: 0	3.12E-16	3.79E-14	3.79E-14	TH 777.	169.	9.47E-07
16G	9.7	199	9 14: 0	2.45E-16	2.99E-14	2.99E-14	TH 881.	183.	7.86E-07
15G	11.1	200	9 14: 0	2.01E-16	2.44E-14	2.44E-14	TH 982.	196.	6.73E-07
14G	12.4	201	9 14: 0	1.69E-16	2.05E-14	2.05E-14	TH 1081	208.	5.88E-07
13G	15.1	203	9 14: 0	1.45E-16	1.76E-14	1.76E-14	TH 1273	230.	4.21E-07
12G	16.5	203	9 14: 0	1.02E-16	1.24E-14	1.24E-14	TH 1374	241.	3.49E-07
11G	18.1	204	9 14: 0	8.30E-17	1.01E-14	1.01E-14	TH 1483	252.	2.90E-07
10G	19.7	203	9 14: 0	6.76E-17	8.23E-15	8.23E-15	TH 1597	263.	2.43E-07
9G	21.4	203	9 14: 0	5.55E-17	6.76E-15	6.76E-15	TH 1718	275.	2.18E-07
8G	23.1	203	9 14: 0	4.86E-17	5.92E-15	5.92E-15	TH 1837	286.	1.98E-07
7G	24.8	202	9 14: 0	4.31E-17	5.24E-15	5.24E-15	TH 1955	296.	1.81E-07
6G	26.5	202	9 14: 0	3.83E-17	4.66E-15	4.66E-15	TH 2072	307.	1.66E-07
5G	28.2	202	9 14: 0	3.43E-17	4.18E-15	4.18E-15	TH 2187	316.	1.51E-07
4G	29.9	201	9 14: 0	3.03E-17	3.69E-15	3.69E-15	TH 2303	326.	1.38E-07
3G	31.6	201	9 14: 0	2.69E-17	3.27E-15	3.27E-15	TH 2419	335.	1.27E-07
2G	33.3	201	9 14: 0	2.38E-17	2.90E-15	2.90E-15	TH 2536	345.	1.17E-07
1G	35.0	200	9 14: 0	2.12E-17	2.58E-15	2.58E-15			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 14:05  
STABILITY CLASS D

DATE: 83/01/19

ELEV: 4.6 MPH FROM 029 DEG

CURRENT PLUME INFORMATION AS OF 14:00 ON 83/01/19  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CH1/Q

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z
----	------	-----	-----	------	------------	---------	--------------	---	---

JULIAN DAY = 19											
20E	1.1	210	9	14: 0	2.88E+02	1.44E+01	2.88E+02	WB	124.	48.2	5.44E-06
24E	SB	210	9	14: 0	2.30E+02	1.15E+01	2.30E+02	WB	90.8	0.0	1.35E-06
23E	2.2	208	9	14: 0	2.80E+02	1.41E+01	2.80E+02	WB	212.	71.1	5.16E-06
27E	3.1	206	9	14: 0	3.05E+02	1.56E+01	3.05E+02	WB	293.	88.9	5.52E-06
21E	3.7	204	9	14: 0	3.16E+02	1.63E+01	3.16E+02	WR	342.	98.9	5.59E-06
20E	4.5	203	9	14: 0	2.43E+02	1.26E+01	2.43E+02	WB	408.	111.	4.23E-06
19E	5.6	202	9	14: 0	1.44E+02	7.61E+00	1.44E+02	WR	583.	140.	1.55E-06
18E	6.8	200	9	14: 0	9.19E+01	4.89E+00	9.19E+01	WB	692.	157.	1.05E-06
19E	8.3	200	9	14: 0	6.24E+01	3.36E+00	6.24E+01	WB	797.	172.	8.58E-07
18E	9.7	199	9	14: 0	5.11E+01	2.78E+00	5.11E+01	WB	899.	185.	6.95E-07
16E	11.1	200	9	14: 0	4.04E+01	2.22E+00	4.04E+01	WB	998.	198.	6.05E-07
19E	12.4	201	9	14: 0	3.32E+01	1.84E+00	3.32E+01	WB	1191	220.	4.72E-07
18E	15.1	203	9	14: 0	2.26E+01	1.27E+00	2.26E+01	WB	1293	232.	3.87E-07
12E	16.5	203	9	14: 0	1.30E+01	7.44E-01	1.30E+01	WB	1402	243.	3.21E-07
11E	18.1	204	9	14: 0	2.81E+00	1.61E+01	1.61E+01	TH	1517	255.	2.67E-07
10E	19.7	203	9	14: 0	6.26E-02	2.16E-01	2.16E-01	TH	1638	267.	2.20E-07
9E	21.4	203	9	14: 0	5.00E-02	1.74E-01	1.74E-01	TH	1758	278.	2.03E-07
8E	23.1	203	9	14: 0	1.37E-02	1.53E-01	1.53E-01	TH	1876	289.	1.85E-07
7E	24.8	202	9	14: 0	3.77E-02	1.33E-01	1.33E-01	TH	1993	300.	1.70E-07
5E	26.5	202	9	14: 0	3.19E-02	1.13E-01	1.13E-01	TH	2108	310.	1.57E-07
5E	28.2	202	9	14: 0	2.70E-02	9.68E-02	9.68E-02	TH	2224	319.	1.43E-07
4E	29.9	201	9	14: 0	2.14E-02	7.74E-02	7.74E-02	TH	2341	329.	1.32E-07
3E	31.6	201	9	14: 0	1.64E-02	5.95E-02	5.95E-02	TH	2458	338.	1.22E-07
2E	33.3	201	9	14: 0	1.13E-02	4.13E-02	4.13E-02	TH	2576	348.	1.12E-07
1E	35.0	200	9	14: 0	3.11E-03	1.14E-02	1.14E-02	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 14:06

DATE: 83/01/19

STABILITY CLASS D

ELEV: 4.6 MPH FROM 029 DEG

CURRENT PLUME INFORMATION AS OF 14:00 ON 83/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/R  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY = 19											
29G	1.1	210	9	14: 0	7.22E-15	8.79E-13	8.79E-13	TH	125.	49.4	2.51E-05
29G	SB	210	9	14: 0	1.23E-14	1.50E-12	1.50E-12	TH	91.5	0.0	4.30E-05
29G	2.2	208	9	14: 0	2.99E-15	3.64E-13	3.64E-13	TH	224.	74.6	1.05E-05
29G	3.1	206	9	14: 0	1.81E-15	2.21E-13	2.21E-13	TH	307.	92.5	6.46E-06
29G	3.7	204	9	14: 0	1.94E-15	2.36E-13	2.36E-13	TH	384.	107.	6.99E-06
29G	4.5	203	9	14: 0	1.17E-15	1.42E-13	1.42E-13	TH	433.	116.	4.27E-06
19G	5.6	202	9	14: 0	7.36E-16	8.96E-14	8.96E-14	TH	497.	127.	2.71E-06
19G	6.8	200	9	14: 0	4.72E-16	5.75E-14	5.75E-14	TH	575.	140.	1.77E-06
19G	8.3	200	9	14: 0	3.12E-16	3.79E-14	3.79E-14	TH	669.	154.	1.18E-06
19G	9.7	199	9	14: 0	2.45E-16	2.99E-14	2.99E-14	TH	777.	169.	9.47E-07
19G	11.1	200	9	14: 0	2.01E-16	2.44E-14	2.44E-14	TH	881.	183.	7.86E-07
19G	12.4	201	9	14: 0	1.69E-16	2.05E-14	2.05E-14	TH	982.	196.	6.73E-07
19G	15.1	203	9	14: 0	1.45E-16	1.76E-14	1.76E-14	TH	1081	208.	5.88E-07
19G	16.5	203	9	14: 0	1.02E-16	1.21E-14	1.21E-14	TH	1273	230.	4.21E-07
19G	18.1	204	9	14: 0	8.30E-17	1.01E-14	1.01E-14	TH	1374	241.	3.49E-07
19G	19.7	203	9	14: 0	6.76E-17	8.23E-15	8.23E-15	TH	1483	252.	2.90E-07
9G	21.4	203	9	14: 0	5.55E-17	6.76E-15	6.76E-15	TH	1597	263.	2.43E-07
8G	23.1	203	9	14: 0	4.86E-17	5.92E-15	5.92E-15	TH	1718	275.	2.18E-07
7G	24.8	202	9	14: 0	4.31E-17	5.24E-15	5.24E-15	TH	1837	286.	1.98E-07
3	26.5	202	9	14: 0	3.83E-17	4.66E-15	4.66E-15	TH	1955	296.	1.81E-07
5G	28.2	202	9	14: 0	3.43E-17	4.18E-15	4.18E-15	TH	2072	307.	1.66E-07
4G	29.9	201	9	14: 0	3.03E-17	3.69E-15	3.69E-15	TH	2187	316.	1.51E-07
3G	31.6	201	9	14: 0	2.69E-17	3.27E-15	3.27E-15	TH	2303	326.	1.38E-07
2G	33.3	201	9	14: 0	2.38E-17	2.90E-15	2.90E-15	TH	2419	335.	1.27E-07
1G	35.0	200	9	14: 0	2.12E-17	2.58E-15	2.58E-15	TH	2536	345.	1.17E-07
1G	40.0	201	9	15: 6	1.74E-17	2.12E-15	2.12E-15	TH	2879	0.0	9.62E-08
1G	50.0	203	9	17:18	1.25E-17	1.52E-15	1.52E-15	TH	3558	0.0	6.91E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 14:06  
STABILITY CLASS D

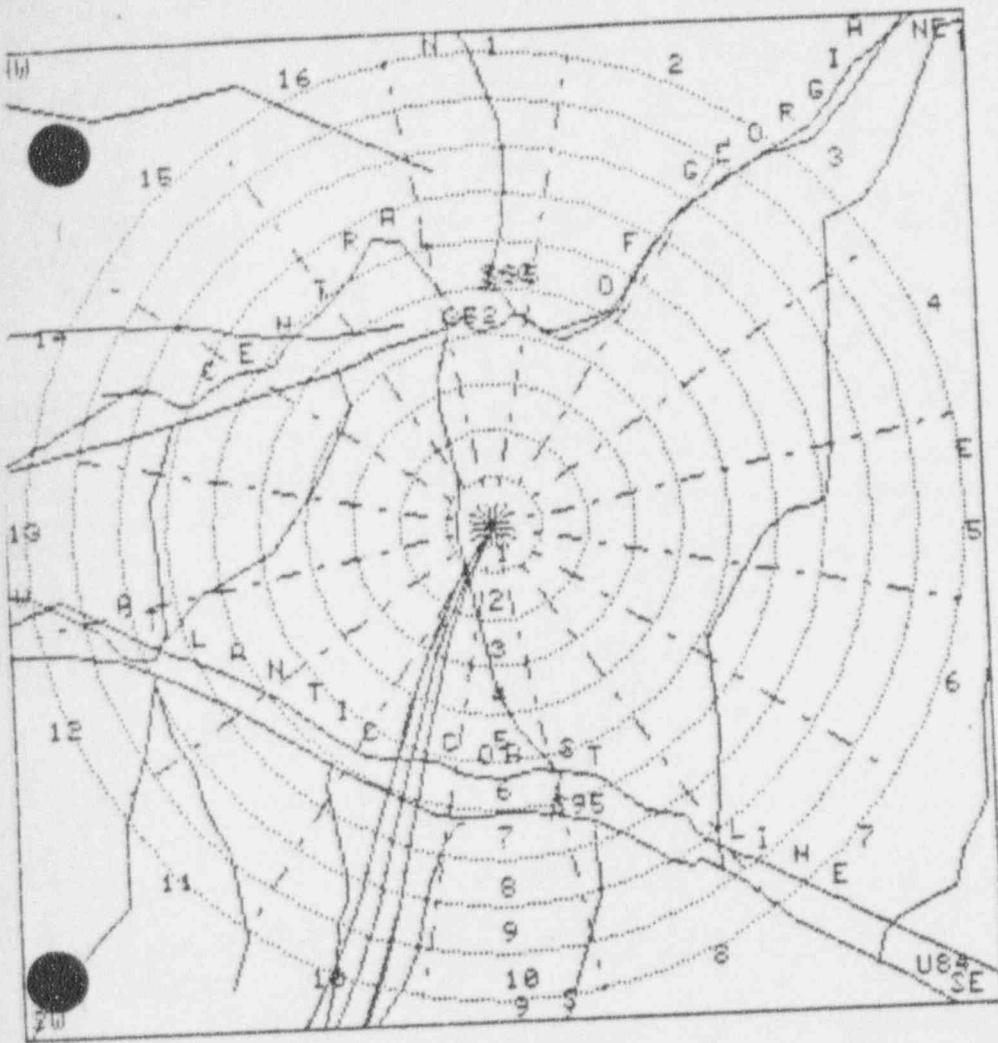
DATE: 83/01/19

ELEV: 4.6 MPH FROM 029 DEG

CURRENT PLUME INFORMATION AS OF 14:00 ON 83/01/19  
ABBREVIATED PROJECTION

ID	MILE	DEC SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN 2.14*SIGMA	CH1/0
				WHOLE BODY	THYROID		

JULIAN DAY =	19						
24E	1.1	210	9 14: 0	2.88E+02	1.44E+01	2.88E+02	WB 124 48.2 5.44E-06
25E	SB	210	9 14: 0	2.30E+02	1.15E+01	2.30E+02	WB 90.8 0.0 4.35E-06
26E	2.2	208	9 14: 0	2.80E+02	1.41E+01	2.80E+02	WR 212 71.1 5.16E-06
27E	3.1	206	9 10: 0	3.05E+02	1.56E+01	3.05E+02	WB 293 88.9 5.52E-06
28E	3.7	204	9 14: 0	3.16E+02	1.63E+01	3.16E+02	WB 342 98.9 5.59E-06
29E	4.5	203	9 14: 0	2.43E+02	1.26E+01	2.43E+02	WB 408 111 4.23E-06
30E	5.6	202	9 14: 0	1.44E+02	7.61E+00	1.44E+02	WB 488 125 2.47E-06
31E	6.8	200	9 14: 0	9.19E+01	4.89E+00	9.19E+01	WB 583 140 1.55E-06
32E	8.3	200	9 14: 0	6.24E+01	3.36E+00	6.24E+01	WR 692 157 1.05E-06
33E	9.7	199	9 14: 0	5.11E+01	2.78E+00	5.11E+01	WB 797 172 9.58E-07
34E	11.1	200	9 14: 0	4.04E+01	2.22E+00	4.04E+01	WB 899 185 6.95E-07
35E	12.4	201	9 14: 0	3.32E+01	1.84E+00	3.32E+01	WB 998 198 6.05E-07
36E	15.1	203	9 14: 0	2.26E+01	1.27E+00	2.26E+01	WR 1191 220 4.72E-07
37E	16.5	203	9 14: 0	1.30E+01	7.44E-01	1.30E+01	WB 1293 232 3.21E-07
38E	18.1	204	9 14: 0	2.81E+00	1.61E+01	1.61E+01	TH 1402 243 3.67E-07
39E	19.7	203	9 14: 0	6.26E-02	2.16E-01	2.16E-01	TH 1517 255 2.20E-07
40E	21.4	203	9 14: 0	5.00E-02	1.74E-01	1.74E-01	TH 1638 267 2.03E-07
41E	23.1	203	9 14: 0	4.37E-02	1.53E-01	1.53E-01	TH 1758 278 1.85E-07
42E	24.8	202	9 14: 0	3.77E-02	1.33E-01	1.33E-01	TH 1876 289 1.70E-07
43E	26.5	202	9 14: 0	3.19E-02	1.13E-01	1.13E-01	TH 1993 300 1.57E-07
44E	28.2	202	9 14: 0	2.70E-02	9.68E-02	9.68E-02	TH 2108 310 1.43E-07
45E	29.9	201	9 14: 0	2.14E-02	7.74E-02	7.74E-02	TH 2224 319 1.32E-07
46E	31.6	201	9 14: 0	1.64E-02	5.95E-02	5.95E-02	TH 2341 329 1.22E-07
47E	33.3	201	9 14: 0	1.13E-02	4.13E-02	4.13E-02	TH 2458 338 1.12E-07
48E	35.0	200	9 14: 0	3.11E-03	1.14E-02	1.14E-02	TH 2576 348 9.28E-08
49E	40.0	201	9 15: 6	2.56E-03	9.43E-03	9.43E-03	TH 2919 0.0 6.72E-08
50E	50.0	203	9 17:18	1.85E-03	6.83E-03	6.83E-03	TH 3597 0.0



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT  
DATE: 83/01/14 -DAY- TIME: 14:06  
ELEV: 4.6 MPH FROM 029 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 14:00

ROADS AND RAILROADS		STATUS
TOGGLE		
1.	FEDERAL ROADS	ON
2.	STATE ROADS	ON
3.	COUNTY ROADS	ON
4.	RAILROADS	ON
5.	ALL ON	
6.	ALL OFF	
7.	EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 14:19

DATE: 03/01/19

STABILITY CLASS D

ELEV: 4.7 MPH FROM 034 DEG

CURRENT PLUME INFORMATION AS OF 14:15 ON 03/01/19

PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHJ/Q

ID MILE DEC SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JULIAN DAY	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
19	1.2	214	10	14:15	6.66E-15	8.35E-13	8.35E-13	TH	127.	50.1	2.37E-05
25G	SB	214	10	14:15	1.18E-14	1.48E-12	1.48E-12	TH	91.5	0.0	4.20E-05
25G	2.3	212	9	14:15	2.48E-15	3.11E-13	3.11E-13	TH	229.	75.7	8.93E-06
23G	3.3	210	9	14:15	1.57E-15	1.96E-13	1.96E-13	TH	323.	95.7	5.71E-06
22G	4.3	208	9	14:15	1.11E-15	1.40E-13	1.40E-13	TH	403.	111.	4.11E-06
21G	4.9	207	9	14:15	1.30E-15	1.64E-13	1.64E-13	TH	478.	124.	4.86E-06
20G	5.7	205	9	14:15	8.22E-16	1.03E-13	1.03E-13	TH	525.	132.	3.09E-06
19G	6.7	204	9	14:15	5.39E-16	6.75E-14	6.75E-14	TH	588.	142.	2.05E-06
18G	8.0	202	9	14:15	3.60E-16	4.51E-14	4.51E-14	TH	666.	153.	1.39E-06
18G	9.4	201	9	14:15	2.46E-16	3.08E-14	3.08E-14	TH	758.	167.	9.66E-07
17G	10.8	201	9	14:15	1.99E-16	2.50E-14	2.50E-14	TH	865.	181.	7.95E-07
15G	12.2	201	9	14:15	1.67E-16	2.09E-14	2.09E-14	TH	968.	194.	6.75E-07
14G	13.6	202	9	14:15	1.42E-16	1.78E-14	1.78E-14	TH	1069	206.	5.87E-07
13G	16.2	204	9	14:15	1.24E-16	1.55E-14	1.55E-14	TH	1167	218.	5.20E-07
12G	17.7	204	9	14:15	8.91E-17	1.11E-14	1.11E-14	TH	1358	239.	3.80E-07
11G	19.2	204	9	14:15	7.30E-17	9.15E-15	9.15E-15	TH	1459	249.	3.17E-07
10G	20.8	204	9	14:15	5.99E-17	7.51E-15	7.51E-15	TH	1567	260.	2.66E-07
9G	22.6	204	9	14:15	4.96E-17	6.21E-15	6.21E-15	TH	1681	271.	2.24E-07
8G	24.3	203	9	14:15	4.37E-17	5.47E-15	5.47E-15	TH	1801	283.	2.02E-07
7G	26.0	203	9	14:15	3.89E-17	4.87E-15	4.87E-15	TH	1920	293.	1.85E-07
6G	27.7	202	9	14:15	3.47E-17	4.35E-15	4.35E-15	TH	2038	304.	1.69E-07
5G	29.3	202	9	14:15	3.12E-17	3.91E-15	3.91E-15	TH	2154	314.	1.56E-07
4G	31.0	202	9	14:15	2.77E-17	3.47E-15	3.47E-15	TH	2269	323.	1.43E-07
3G	32.7	201	9	14:15	2.46E-17	3.09E-15	3.09E-15	TH	2385	333.	1.31E-07
2G	34.4	201	9	14:15	2.19E-17	2.74E-15	2.74E-15	TH	2501	342.	1.20E-07
1G	36.1	201	9	14:15	1.95E-17	2.45E-15	2.45E-15	TH	2618	351.	1.11E-07

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 14:20

DATE: 03/01/19

STABILITY CLASS D

ELEV: 4.7 MPH FROM 034 DEG

CURRENT PLUME INFORMATION AS OF 14:15 ON 03/01/19

PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	WB	127	48.9	1.33E-05
JULIAN DAY = 19											
25E	1.2	214	10	14:15	6.60E+02	3.43E+01	6.60E+02	WB	90.8	0.0	4.50E-06
25E	SR	214	10	14:15	2.22E+02	1.15E+01	2.22E+02	WB	227	74.4	4.78E-06
24E	2.3	212	9	14:15	2.40E+02	1.26E+01	2.40E+02	WB	309	92.4	4.99E-06
23E	3.3	210	9	14:15	2.57E+02	1.36E+01	2.57E+02	WB	387	107.	4.06E-06
22E	4.3	208	9	14:15	2.14E+02	1.14E+01	2.14E+02	WB	435	116.	4.70E-06
21E	4.9	207	9	14:15	2.53E+02	1.37E+01	2.53E+02	WB	499	127.	2.85E-06
20E	5.7	205	9	14:15	1.56E+02	8.51E+00	1.56E+02	WB	577	140.	1.89E-06
19E	6.7	204	9	14:15	1.05E+02	5.80E+00	1.05E+02	WB	671	154.	1.28E-06
18E	8.0	202	9	14:15	7.21E+01	4.02E+00	7.21E+01	WB	779	169.	8.73E-07
17E	9.4	201	9	14:15	4.94E+01	2.78E+00	4.94E+01	WB	883	183.	7.00E-07
16E	10.8	201	9	14:15	3.97E+01	2.26E+00	3.97E+01	WB	984	196.	6.06E-07
15E	12.2	201	9	14:15	3.36E+01	1.93E+00	3.36E+01	WB	1083	208.	5.35E-07
14E	13.6	202	9	14:15	2.79E+01	1.62E+00	2.79E+01	WB	1274	230.	4.26E-07
13E	16.2	204	9	14:15	1.94E+01	1.14E+00	1.94E+01	WB	1376	241.	3.52E-07
12E	17.7	204	9	14:15	1.13E+01	6.74E-01	1.13E+01	TH	1484	252.	2.94E-07
11E	19.2	204	9	14:15	2.45E+00	1.46E+01	1.46E+01	TH	1599	263.	2.42E-07
10E	20.8	204	9	14:15	5.40E-02	1.95E-01	1.95E-01	TH	1720	275.	2.04E-07
9E	22.6	204	9	14:15	4.42E-02	1.61E-01	1.61E-01	TH	1839	286.	1.89E-07
8E	24.3	203	9	14:15	3.87E-02	1.42E-01	1.42E-01	TH	1957	296.	1.73E-07
7E	26.0	203	9	14:15	3.36E-02	1.24E-01	1.24E-01	TH	2074	307.	1.60E-07
6E	27.7	202	9	14:15	2.86E-02	1.06E-01	1.06E-01	TH	2189	316.	1.48E-07
5E	29.3	202	9	14:15	2.42E-02	9.10E-02	9.10E-02	TH	2305	326.	1.37E-07
4E	31.0	202	9	14:15	1.94E-02	7.35E-02	7.35E-02	TH	2421	335.	1.26E-07
3E	32.7	201	9	14:15	1.48E-02	5.63E-02	5.63E-02	TH	2538	345.	1.16E-07
2E	34.4	201	9	14:15	1.02E-02	3.91E-02	3.91E-02	TH	2656	354.	1.07E-07
1E	36.1	201	9	14:15	2.82E-03	1.08E-02	1.08E-02	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 14:20

DATE: 83/01/19

ELEV: 4.7 MPH FROM 034 DEG

STABILITY CLASS D

CURRENT PLUME INFORMATION AS OF 14:15 ON 83/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/Hr) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	TH	127.	50.1	2.37E-05
JULIAN DAY = 19											
25G	1.2	214	10	14:15	6.66E-15	8.35E-13	8.35E-13	TH	91.5	0.0	4.20E-05
25G	SB	214	10	14:15	1.18E-14	1.48E-12	1.48E-12	TH	229.	75.7	8.93E-06
24G	2.3	212	9	14:15	2.48E-15	3.11E-13	3.11E-13	TH	323.	95.7	5.71E-06
23G	3.3	210	9	14:15	1.57E-15	1.96E-13	1.96E-13	TH	403.	111.	4.11E-06
23G	4.3	208	9	14:15	1.11E-15	1.40E-13	1.40E-13	TH	478.	124.	4.86E-06
21G	4.9	207	9	14:15	1.30E-15	1.64E-13	1.64E-13	TH	525.	132.	3.09E-06
20G	5.7	205	9	14:15	8.22E-16	1.03E-13	1.03E-13	TH	588.	142.	2.05E-06
19G	6.7	204	9	14:15	5.39E-16	6.75E-14	6.75E-14	TH	666.	153.	1.39E-06
18G	8.0	202	9	14:15	3.60E-16	4.51E-14	4.51E-14	TH	758.	167.	9.66E-07
17G	9.4	201	9	14:15	2.46E-16	3.08E-14	3.08E-14	TH	865.	181.	7.95E-07
16G	10.8	201	9	14:15	1.99E-16	2.50E-14	2.50E-14	TH	968.	194.	6.75E-07
15G	12.2	201	9	14:15	1.67E-16	2.09E-14	2.09E-14	TH	1069	206.	5.87E-07
14G	13.6	202	9	14:15	1.42E-16	1.78E-14	1.78E-14	TH	1167	218.	5.20E-07
13G	16.2	204	9	14:15	1.24E-16	1.55E-14	1.55E-14	TH	1358	239.	3.80E-07
12G	17.7	204	9	14:15	8.91E-17	1.11E-14	1.11E-14	TH	1459	249.	3.17E-07
11G	19.2	204	9	14:15	7.30E-17	9.15E-15	9.15E-15	TH	1567	260.	2.66E-07
10G	20.8	204	9	14:15	5.99E-17	7.51E-15	7.51E-15	TH	1681	271.	2.24E-07
9G	22.6	204	9	14:15	4.96E-17	6.21E-15	6.21E-15	TH	1801	283.	2.02E-07
8G	24.3	203	9	14:15	4.37E-17	5.47E-15	5.47E-15	TH	1920	293.	1.85E-07
7G	26.0	203	9	14:15	3.89E-17	4.87E-15	4.87E-15	TH	2038	304.	1.69E-07
6G	27.7	202	9	14:15	3.47E-17	4.35E-15	4.35E-15	TH	2154	314.	1.56E-07
5G	29.3	202	9	14:15	3.12E-17	3.91E-15	3.91E-15	TH	2269	323.	1.43E-07
4G	31.0	202	9	14:15	2.77E-17	3.47E-15	3.47E-15	TH	2385	333.	1.31E-07
3G	32.7	201	9	14:15	2.46E-17	3.09E-15	3.09E-15	TH	2501	342.	1.20E-07
2G	34.4	201	9	14:15	2.19E-17	2.74E-15	2.74E-15	TH	2618	351.	1.11E-07
1G	36.1	201	9	14:15	1.95E-17	2.45E-15	2.45E-15	TH	2886	0.0	9.58E-08
1G	40.0	202	9	15: 5	1.68E-17	2.10E-15	2.10E-15	TH	3571	0.0	6.87E-08
1G	50.0	204	9	17:15	1.20E-17	1.51E-15	1.51E-15	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 14:21  
STABILITY CLASS D

DATE: 03/01/19

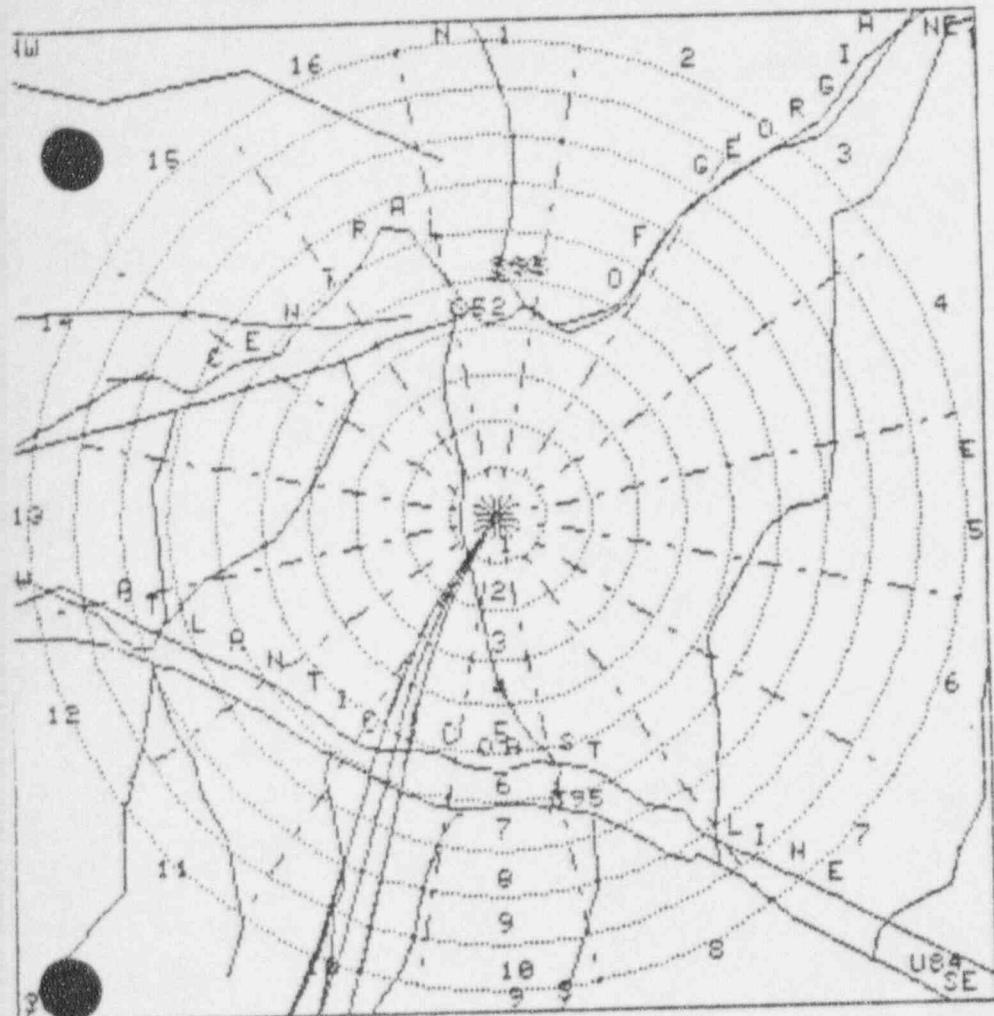
ELEV: 4.7 MPH FROM 034 DEG

CURRENT PLUME INFORMATION AS OF 14:15 ON 03/01/19

ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY = 19											
25E	1.2	214	10	14:15	6.60E+02	3.43E+01	6.60E+02	WB	127.	48.9	1.33E-05
26E	SB	214	10	14:15	2.22E+02	1.15E+01	2.22E+02	WB	90.8	0.0	4.50E-06
24E	2.3	212	9	14:15	2.40E+02	1.26E+01	2.40E+02	WB	227.	74.4	4.78E-06
23E	3.3	210	9	14:15	2.57E+02	1.36E+01	2.57E+02	WB	309.	92.4	4.99E-06
22E	4.3	208	9	14:15	2.14E+02	1.14E+01	2.14E+02	WB	387.	107.	4.06E-06
20E	4.9	207	9	14:15	2.53E+02	1.37E+01	2.53E+02	WB	435.	116.	4.70E-06
39E	5.7	205	9	14:15	1.56E+02	8.51E+00	1.56E+02	WB	499.	127.	2.85E-06
18E	6.7	204	9	14:15	1.05E+02	5.80E+00	1.05E+02	WB	577.	140.	1.89E-06
17E	8.0	202	9	14:15	4.94E+01	2.78E+00	4.94E+01	WB	671.	154.	1.28E-06
16E	9.4	201	9	14:15	3.97E+01	2.26E+00	3.97E+01	WB	779.	169.	8.73E-07
10E	10.8	201	9	14:15	3.36E+01	1.93E+00	3.36E+01	WB	984.	196.	6.06E-07
15E	12.2	201	9	14:15	3.36E+01	1.62E+00	2.79E+01	WB	1083	208.	5.35E-07
14E	13.6	202	9	14:15	2.79E+01	1.14E+00	1.94E+01	WB	1274	230.	4.26E-07
13E	16.2	204	9	14:15	1.94E+01	1.14E+00	1.13E+01	WB	1376	241.	3.52E-07
12E	17.7	204	9	14:15	1.13E+01	6.74E-01	1.13E+01	TH	1484	252.	2.94E-07
11E	19.2	204	9	14:15	2.45E+00	1.46E+01	1.46E+01	TH	1599	263.	2.42E-07
10E	20.8	204	9	14:15	5.40E-02	1.95E-01	1.95E-01	TH	1720	275.	2.04E-07
9E	22.6	204	9	14:15	4.42E-02	1.61E-01	1.61E-01	TH	1839	286.	1.89E-07
8E	24.3	203	9	14:15	3.87E-02	1.42E-01	1.42E-01	TH	1957	296.	1.73E-07
7E	26.0	203	9	14:15	3.36E-02	1.24E-01	1.24E-01	TH	2074	307.	1.60E-07
6E	27.7	202	9	14:15	2.86E-02	1.06E-01	1.06E-01	TH	2189	316.	1.48E-07
5E	29.3	202	9	14:15	2.42E-02	9.10E-02	9.10E-02	TH	2305	326.	1.37E-07
4E	31.0	202	9	14:15	1.94E-02	7.35E-02	7.35E-02	TH	2421	335.	1.26E-07
3E	32.7	201	9	14:15	1.48E-02	5.63E-02	5.63E-02	TH	2538	345.	1.16E-07
2E	34.4	201	9	14:15	1.02E-02	3.91E-02	3.91E-02	TH	2656	354.	1.07E-07
1E	36.1	201	9	14:15	2.82E-03	1.08E-02	1.08E-02	TH	2923	0.0	9.26E-08
1E	40.0	202	9	15: 5	2.43E-03	9.37E-03	9.37E-03	TH	3608	0.0	6.69E-08
1E	50.0	204	9	17:15	1.76E-03	6.77E-03	6.77E-03	TH			



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 14:20  
ELEV: 4.7 MPH FROM 034 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 14:15

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 03/01/19

TIME: 14:35

ELEV: 5.1 MPH FROM 028 DEG

STABILITY CLASS D

CURRENT PLUME INFORMATION AS OF 14:30 ON 03/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	TH	137.	52.9	1.90E-05
JULIAN DAY = 19											
26G	1.3	208	9	14:30	5.23E-15	6.73E-13	6.73E-13	TH	137.	52.9	1.90E-05
26G	SB	208	9	14:30	1.05E-14	1.36E-12	1.36E-12	TH	91.5	0.0	3.83E-05
26G	2.5	211	9	14:30	2.08E-15	2.68E-13	2.68E-13	TH	248.	79.9	7.64E-06
26G	3.6	211	9	14:30	1.22E-15	1.57E-13	1.57E-13	TH	343.	99.7	4.53E-06
26G	4.6	209	9	14:30	9.33E-16	1.20E-13	1.20E-13	TH	434.	116.	3.50E-06
22G	5.6	208	9	14:30	7.31E-16	9.41E-14	9.41E-14	TH	511.	129.	2.77E-06
21G	6.2	207	9	14:30	9.10E-16	1.17E-13	1.17E-13	TH	585.	141.	3.49E-06
20G	7.0	206	9	14:30	5.89E-16	7.59E-14	7.59E-14	TH	631.	148.	2.29E-06
20G	8.0	204	9	14:30	3.99E-16	5.14E-14	5.14E-14	TH	693.	157.	1.57E-06
18G	9.2	203	9	14:30	2.75E-16	3.55E-14	3.55E-14	TH	769.	168.	1.10E-06
18G	10.7	202	9	14:30	1.94E-16	2.50E-14	2.50E-14	TH	861.	180.	7.85E-07
16G	12.1	202	9	14:30	1.61E-16	2.08E-14	2.08E-14	TH	966.	194.	6.64E-07
16G	13.5	202	9	14:30	1.37E-16	1.77E-14	1.77E-14	TH	1069	206.	5.75E-07
15G	14.9	202	9	14:30	1.19E-16	1.54E-14	1.54E-14	TH	1169	218.	5.08E-07
13G	17.5	204	9	14:30	1.05E-16	1.36E-14	1.36E-14	TH	1267	229.	4.56E-07
12G	19.0	204	9	14:30	7.72E-17	9.94E-15	9.94E-15	TH	1456	249.	3.39E-07
11G	20.5	204	9	14:30	6.38E-17	8.22E-15	8.22E-15	TH	1557	259.	2.86E-07
10G	22.1	204	9	14:30	5.28E-17	6.79E-15	6.79E-15	TH	1661	270.	2.41E-07
9G	23.9	204	9	14:30	4.39E-17	5.66E-15	5.66E-15	TH	1778	280.	2.05E-07
5	25.6	203	9	14:30	3.89E-17	5.02E-15	5.02E-15	TH	1898	291.	1.86E-07
7G	27.3	203	9	14:30	3.49E-17	4.49E-15	4.49E-15	TH	2017	302.	1.71E-07
6G	29.0	203	9	14:30	3.13E-17	4.03E-15	4.03E-15	TH	2134	312.	1.57E-07
5G	30.6	202	9	14:30	2.83E-17	3.64E-15	3.64E-15	TH	2250	322.	1.46E-07
4G	32.3	202	9	14:30	2.51E-17	3.24E-15	3.24E-15	TH	2365	331.	1.34E-07
3G	34.0	202	9	14:30	2.24E-17	2.89E-15	2.89E-15	TH	2480	340.	1.23E-07
2G	35.7	201	9	14:30	2.00E-17	2.58E-15	2.58E-15	TH	2596	349.	1.13E-07
1G	37.4	201	9	14:30	1.79E-17	2.31E-15	2.31E-15	TH	2713	358.	1.05E-07

DATE: 83/01/19

ELEV: 5.1 MPH FROM 028 DEG

CURRENT PLUME INFORMATION AS OF 14:30 ON 83/01/19  
PRESENT LOCATIONACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 14:35  
STABILITY CLASS DDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
TIME WHOLE BODY THYROID DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY = 12											
26E	1.3	208	9	14:30	2.67E+02	1.44E+01	2.67E+02	WB	137.	51.8	5.81E-06
26E	SP	208	9	14:30	2.30E+02	1.24E+01	2.30E+02	WB	90.8	0.0	5.00E-06
25E	2.5	211	9	14:30	2.13E+02	1.16E+01	2.13E+02	WB	238.	77.1	4.54E-06
24E	3.6	211	9	14:30	1.97E+02	1.08E+01	1.97E+02	WB	332.	96.9	4.11E-06
23E	4.6	209	9	14:30	1.75E+02	9.74E+00	1.75E+02	WB	412.	112.	3.57E-06
23E	5.6	208	9	14:30	1.31E+02	7.36E+00	1.31E+02	WB	487.	125.	2.62E-06
21E	6.2	207	9	14:30	1.58E+02	8.95E+00	1.58E+02	WB	534.	133.	3.09E-06
20E	7.0	206	9	14:30	1.12E+02	6.43E+00	1.12E+02	WB	596.	143.	2.16E-06
19E	8.0	204	9	14:30	8.10E+01	4.67E+00	8.10E+01	WB	674.	154.	1.53E-06
18E	9.2	203	9	14:30	5.59E+01	3.26E+00	5.59E+01	WB	766.	167.	1.04E-06
18E	10.7	202	9	14:30	3.77E+01	2.22E+00	3.77E+01	WR	873.	182.	6.99E-07
16E	12.1	202	9	14:30	3.25E+01	1.93E+00	3.25E+01	WB	976.	195.	6.02E-07
16E	13.5	202	9	14:30	2.79E+01	1.68E+00	2.79E+01	WB	1077	207.	5.29E-07
19E	14.9	202	9	14:30	2.35E+01	1.43E+00	2.35E+01	WB	1175	219.	4.72E-07
13E	17.5	204	9	14:30	1.66E+01	1.02E+00	1.66E+01	WB	1365	239.	3.83E-07
12E	19.0	203	9	14:30	9.76E+00	6.09E-01	9.76E+00	WB	1467	250.	3.19E-07
11E	20.5	204	9	14:30	2.10E+00	1.31E+01	1.31E+01	TH	1574	261.	2.64E-07
10E	22.1	201	9	14:30	4.73E-02	1.79E-01	1.79E-01	TH	1689	272.	2.22E-07
9E	23.9	204	9	14:30	3.89E-02	1.48E-01	1.48E-01	TH	1809	283.	1.89E-07
12E	25.6	203	9	14:30	3.43E-02	1.31E-01	1.31E-01	TH	1928	294.	1.76E-07
7E	27.3	203	9	14:30	2.99E-02	1.15E-01	1.15E-01	TH	2045	304.	1.62E-07
6E	29.0	203	9	14:30	2.55E-02	9.95E-02	9.95E-02	TH	2162	314.	1.50E-07
5E	30.6	202	9	14:30	2.19E-02	8.60E-02	8.60E-02	TH	2277	324.	1.41E-07
4E	32.3	202	9	14:30	1.75E-02	6.91E-02	6.91E-02	TH	2392	333.	1.29E-07
3E	34.0	202	9	14:30	1.33E-02	5.30E-02	5.30E-02	TH	2509	342.	1.19E-07
2E	35.7	201	9	14:30	9.25E-03	3.70E-02	3.70E-02	TH	2626	351.	1.10E-07
1E	37.4	201	9	14:30	2.56E-03	1.03E-02	1.03E-02	TH	2743	360.	1.02E-07

ACTUAL INCIDENT  
FORLEY NUCLEAR PLANT

TIME: 14:36

STABILITY CLASS D

DATE: 03/01/19

ELEV: 5.1 MPH FROM 020 DEG

CURRENT PLUME INFORMATION AS OF 14:30 ON 03/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14MSIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z
JULIAN DAY =	19									
1G	1.3	208	9	14:30	5.23E-15	6.73E-13	6.73E-13	TH 137	52.9	1.90E-05
2G	5B	208	9	14:30	1.05E-14	1.36E-12	1.36E-12	TH 91.5	0.0	3.83E-05
2G	2.5	211	9	14:30	2.08E-15	2.68E-13	2.68E-13	TH 248	79.9	7.64E-06
2G	3.6	211	9	14:30	1.22E-15	1.57E-13	1.57E-13	TH 343	99.7	4.53E-06
2G	4.6	209	9	14:30	9.33E-16	1.20E-13	1.20E-13	TH 434	116.	3.50E-06
2G	5.6	208	9	14:30	7.31E-16	9.41E-14	9.41E-14	TH 511	129.	2.77E-06
2G	6.2	207	9	14:30	9.10E-16	1.17E-13	1.17E-13	TH 585	141.	3.49E-06
2G	7.0	206	9	14:30	5.89E-16	7.59E-14	7.59E-14	TH 631	148.	2.29E-06
2G	8.0	204	9	14:30	3.99E-16	5.14E-14	5.14E-14	TH 693	157.	1.57E-06
1G	9.2	203	9	14:30	2.75E-16	3.55E-14	3.55E-14	TH 769	168.	1.10E-06
1G	10.7	202	9	14:30	1.94E-16	2.50E-14	2.50E-14	TH 851	180.	7.85E-07
1G	12.1	202	9	14:30	1.61E-16	2.08E-14	2.08E-14	TH 966	194.	6.64E-07
1G	13.5	202	9	14:30	1.37E-16	1.77E-14	1.77E-14	TH 1069	206.	5.75E-07
1G	14.9	202	9	14:30	1.19E-16	1.54E-14	1.54E-14	TH 1169	218.	5.08E-07
1G	17.5	204	9	14:30	1.05E-16	1.36E-14	1.36E-14	TH 1267	229.	4.56E-07
1G	19.0	204	9	14:30	7.72E-17	9.94E-15	9.94E-15	TH 1456	249.	3.39E-07
1G	20.5	204	9	14:30	6.38E-17	8.22E-15	8.22E-15	TH 1557	259.	2.86E-07
1G	22.1	204	9	14:30	5.28E-17	6.79E-15	6.79E-15	TH 1664	270.	2.41E-07
1G	23.9	204	9	14:30	4.39E-17	5.66E-15	5.66E-15	TH 1778	280.	2.05E-07
1G	25.6	203	9	14:30	3.89E-17	5.02E-15	5.02E-15	TH 1898	291.	1.86E-07
1G	27.3	203	9	14:30	3.49E-17	4.49E-15	4.49E-15	TH 2017	302.	1.71E-07
1G	29.0	203	9	14:30	3.13E-17	4.03E-15	4.03E-15	TH 2134	312.	1.57E-07
1G	30.6	202	9	14:30	2.83E-17	3.64E-15	3.64E-15	TH 2250	322.	1.46E-07
1G	32.3	202	9	14:30	2.51E-17	3.24E-15	3.24E-15	TH 2365	331.	1.34E-07
1G	34.0	202	9	14:30	2.24E-17	2.89E-15	2.89E-15	TH 2480	340.	1.23E-07
1G	35.7	201	9	14:30	2.00E-17	2.58E-15	2.58E-15	TH 2596	349.	1.13E-07
1G	37.4	201	9	14:30	1.79E-17	2.31E-15	2.31E-15	TH 2713	358.	1.05E-07
1G	40.0	201	9	15: 0	1.62E-17	2.09E-15	2.09E-15	TH 2889	0.0	9.57E-08
1G	50.0	203	9	16:58	1.17E-17	1.50E-15	1.50E-15	TH 3565	0.0	6.89E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 14:36

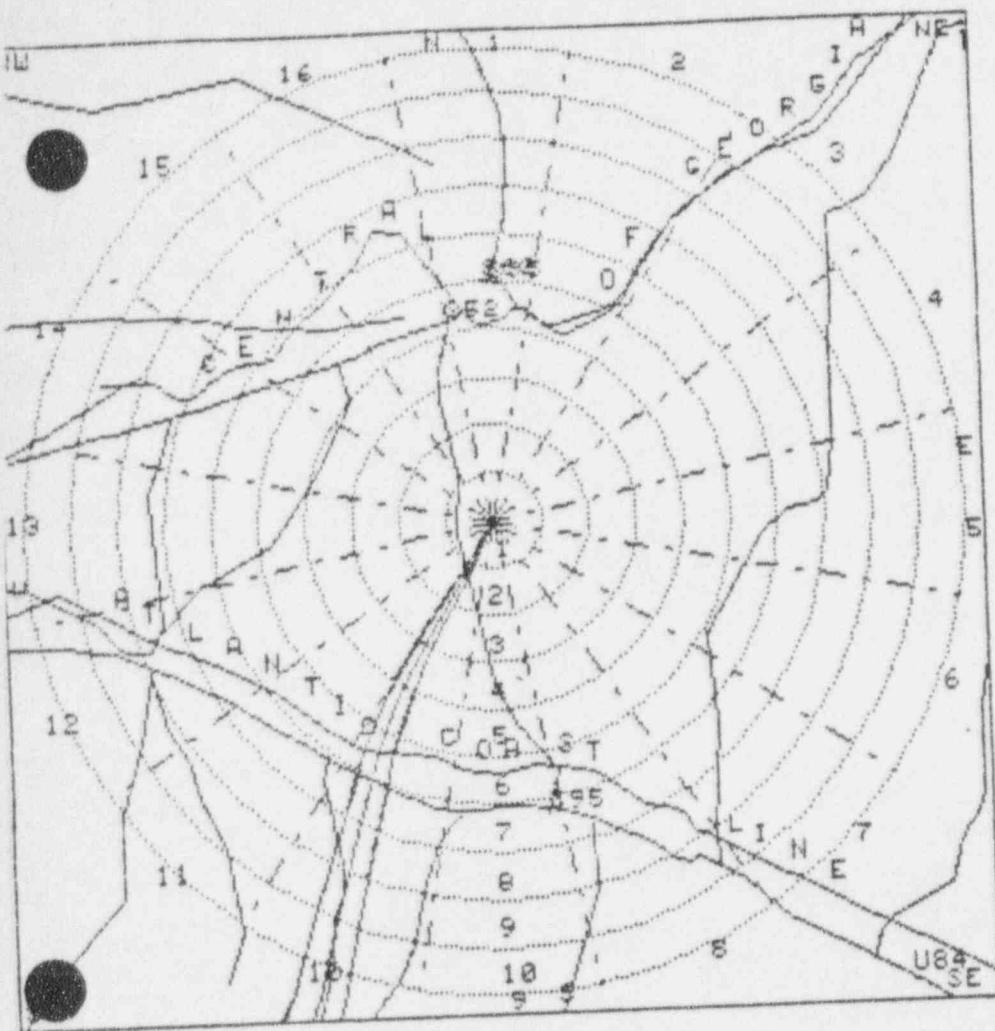
STABILITY CLASS D

DATE: 03/01/19

ELEV: 5.1 MPH FROM 028 DEG

CURRENT PLUME INFORMATION AS OF 14:30 ON 03/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z  
TIME WHOLE BODY THYROID

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z
JULIAN DAY =	19								
26E	1.3	208	9	14:30	2.67E+02	1.44E+01	2.67E+02	WB	137.
26E	SB	208	9	14:30	2.30E+02	1.24E+01	2.30E+02	WB	90.8
25E	2.5	211	9	14:30	2.13E+02	1.16E+01	2.13E+02	WB	238.
24E	3.6	211	9	14:30	1.97E+02	1.08E+01	1.97E+02	WB	332.
23E	4.6	209	9	14:30	1.75E+02	9.74E+00	1.75E+02	WB	412.
22E	5.6	208	9	14:30	1.31E+02	7.36E+00	1.31E+02	WB	487.
21E	6.2	207	9	14:30	1.58E+02	8.95E+00	1.58E+02	WB	534.
20E	7.0	206	9	14:30	1.12E+02	6.43E+00	1.12E+02	WB	596.
19E	8.0	204	9	14:30	8.10E+01	4.67E+00	8.10E+01	WB	674.
18E	9.2	203	9	14:30	5.59E+01	3.26E+00	5.59E+01	WB	766.
17E	10.7	202	9	14:30	3.77E+01	2.22E+00	3.77E+01	WB	873.
16E	12.1	202	9	14:30	3.25E+01	1.93E+00	3.25E+01	WB	976.
15E	13.5	202	9	14:30	2.79E+01	1.68E+00	2.79E+01	WB	1077.
14E	14.9	202	9	14:30	2.35E+01	1.43E+00	2.35E+01	WB	1175
13E	17.5	204	9	14:30	1.66E+01	1.02E+00	1.66E+01	WB	1365
12E	19.0	204	9	14:30	9.76E+00	6.09E-01	9.76E+00	WB	1467
11E	20.5	204	9	14:30	2.10E+00	1.31E+01	1.31E+01	TH	1574
10E	22.1	204	9	14:30	4.73E-02	1.79E-01	1.79E-01	TH	1689
9E	23.9	204	9	14:30	3.89E-02	1.48E-01	1.48E-01	TH	1809
8E	25.6	203	9	14:30	3.43E-02	1.31E-01	1.31E-01	TH	1928
7E	27.3	203	9	14:30	2.99E-02	1.15E-01	1.15E-01	TH	2045
6E	29.0	203	9	14:30	2.55E-02	9.95E-02	9.95E-02	TH	2162
5E	30.6	202	9	14:30	2.19E-02	8.60E-02	8.60E-02	TH	2277
4E	32.3	202	9	14:30	1.75E-02	6.91E-02	6.91E-02	TH	2392
3E	34.0	202	9	14:30	1.33E-02	5.30E-02	5.30E-02	TH	2509
2E	35.7	201	9	14:30	9.25E-03	3.70E-02	3.70E-02	TH	2626
1E	37.4	201	9	14:30	2.56E-03	1.03E-02	1.03E-02	TH	2743
1E	40.0	201	9	15: 0	2.32E-03	9.36E-03	9.36E-03	TH	2919
1E	50.0	203	9	16:58	1.68E-03	6.78E-03	6.78E-03	TH	3595



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT  
DATE: 83/01/14 -DAY- TIME: 14:36  
ELEV: 5.1 MPH FROM 028 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 14:30

ROADS AND RAILROADS		STATUS
TOGGLE		
1. FEDERAL ROADS		ON
2. STATE ROADS		ON
3. COUNTY ROADS		ON
4. RAILROADS		ON
5. ALL ON		
6. ALL OFF		
7. EXIT		

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 14:50

DATE: 03/01/19

STABILITY CLASS D

ELEV: 4.6 MPH FROM 022 DEG

CURRENT PLUME INFORMATION AS OF 14:45 ON 03/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.10\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	TH	125	49.4	2.51E-05
28G	1.1	202	9	14:45	6.77E-15	8.96E-13	8.96E-13	TH	91.5	0.0	4.30E-05
29G	SB	202	9	14:45	1.16E-14	1.53E-12	1.53E-12	TH	224	74.6	8.24E-06
26G	2.4	205	9	14:45	2.20E-15	2.91E-13	2.91E-13	TH	330	97.0	4.73E-06
25G	3.6	208	9	14:45	1.25E-15	1.65E-13	1.65E-13	TH	423	114.	3.20E-06
28G	4.7	208	9	14:45	8.38E-16	1.10E-13	1.10E-13	TH	511	129.	2.66E-06
25G	5.7	208	9	14:45	6.89E-16	9.11E-14	9.11E-14	TH	588	142.	2.20E-06
22G	6.7	207	9	14:45	5.63E-16	7.45E-14	7.45E-14	TH	660	153.	2.86E-06
21G	7.3	206	9	14:45	7.23E-16	9.56E-14	9.56E-14	TH	706	159.	1.90E-06
20G	8.1	205	9	14:45	4.76E-16	6.29E-14	6.29E-14	TH	767	169.	1.33E-06
P8G	9.2	204	9	14:45	3.28E-16	4.34E-14	4.34E-14	TH	843	178.	9.47E-07
18G	10.4	203	9	14:45	2.30E-16	3.04E-14	3.04E-14	TH	934	190.	6.88E-07
17G	11.8	202	9	14:45	1.65E-16	2.18E-14	2.18E-14	TH	1039	203.	5.90E-07
16G	13.3	202	9	14:45	1.39E-16	1.84E-14	1.84E-14	TH	1141	215.	5.18E-07
15G	14.6	202	9	14:45	1.20E-16	1.59E-14	1.59E-14	TH	1241	226.	4.62E-07
14G	16.0	202	9	14:45	1.05E-16	1.39E-14	1.39E-14	TH	1338	237.	4.18E-07
13G	18.7	204	9	14:45	9.39E-17	1.24E-14	1.24E-14	TH	1526	256.	3.15E-07
12G	20.1	204	9	14:45	6.95E-17	9.18E-15	9.18E-15	TH	1627	266.	2.66E-07
11G	21.6	204	9	14:45	5.77E-17	7.63E-15	7.63E-15	TH	1734	276.	2.26E-07
10G	23.3	204	9	14:45	4.79E-17	6.34E-15	6.34E-15	TH	1848	287.	1.93E-07
, 25.0	204	9	14:45	4.01E-17	5.30E-15	5.30E-15	TH	1967	298.	1.76E-07	
8G	26.7	203	9	14:45	3.57E-17	4.72E-15	4.72E-15	TH	2086	308.	1.62E-07
7G	28.4	203	9	14:45	3.21E-17	4.24E-15	4.24E-15	TH	2203	318.	1.49E-07
6G	30.1	203	9	14:45	2.88E-17	3.82E-15	3.82E-15	TH	2319	327.	1.39E-07
5G	31.8	202	9	14:45	2.61E-17	3.46E-15	3.46E-15	TH	2433	337.	1.28E-07
4G	33.4	202	9	14:45	2.33E-17	3.08E-15	3.08E-15	TH	2549	346.	1.18E-07
3G	35.1	202	9	14:45	2.09E-17	2.76E-15	2.76E-15	TH	2664	354.	1.09E-07
2G	36.8	201	9	14:45	1.86E-17	2.46E-15	2.46E-15	TH	2781	363.	1.01E-07
1G	38.6	201	9	14:45	1.67E-17	2.21E-15	2.21E-15	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 14:50

DATE: 83/01/19

STABILITY CLASS D

ELEV: 4.6 MPH FROM 022 DEG

CURRENT PLUME INFORMATION AS OF 14:45 ON 83/01/19

PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	WB	TH	Y	Z
JULIAN DAY = 19										
27E	1.1	202	9 14:45	2.33E+02	1.30E+01	2.33E+02	WB	124.	48.2	5.44E-06
27E	SB	202	9 14:45	1.87E+02	1.04E+01	1.87E+02	WB	90.8	0.0	4.35E-06
26E	2.4	205	9 14:45	1.93E+02	1.09E+01	1.93E+02	WB	236.	76.5	4.40E-06
25E	3.6	208	9 14:45	1.81E+02	1.03E+01	1.81E+02	WB	332.	96.9	4.04E-06
24E	4.7	208	9 14:45	1.38E+02	7.95E+00	1.38E+02	WB	423.	114.	3.02E-06
23E	5.7	208	9 14:45	1.14E+02	6.63E+00	1.14E+02	WB	500.	127.	2.44E-06
22E	6.7	207	9 14:45	9.65E+01	5.65E+00	9.65E+01	WB	574.	139.	2.02E-06
21E	7.3	206	9 14:45	1.28E+02	7.57E+00	1.28E+02	WB	620.	146.	2.62E-06
20E	8.1	205	9 14:45	9.04E+01	5.39E+00	9.04E+01	WB	682.	155.	1.82E-06
19E	9.2	204	9 14:45	6.42E+01	3.87E+00	6.42E+01	WB	759.	166.	1.27E-06
18E	10.4	203	9 14:45	4.33E+01	2.63E+00	4.33E+01	WB	850.	179.	8.48E-07
18E	11.8	202	9 14:45	3.13E+01	1.93E+00	3.13E+01	WB	956.	192.	6.09E-07
16E	13.3	202	9 14:45	2.73E+01	1.70E+00	2.73E+01	WB	1059	205.	5.32E-07
15E	14.6	202	9 14:45	2.37E+01	1.49E+00	2.37E+01	WB	1159	217.	4.73E-07
14E	16.0	202	9 14:45	2.02E+01	1.28E+00	2.02E+01	WB	1257	228.	4.26E-07
13E	18.7	204	9 14:45	1.45E+01	9.34E-01	1.45E+01	WB	1446	248.	3.51E-07
12E	20.1	204	9 14:45	8.42E+00	5.49E-01	8.42E+00	WB	1547	258.	2.89E-07
11E	21.6	204	9 14:45	1.85E+00	1.21E+01	1.21E+01	TH	1654	269.	2.44E-07
10E	23.3	204	9 14:45	4.21E-02	1.66E-01	1.66E-01	TH	1768	279.	2.07E-07
10E	25.0	204	9 14:45	3.48E-02	1.38E-01	1.38E-01	TH	1888	290.	1.77E-07
8E	26.7	203	9 14:45	3.07E-02	1.23E-01	1.23E-01	TH	2007	301.	1.65E-07
7E	28.4	203	9 14:45	2.69E-02	1.08E-01	1.08E-01	TH	2124	311.	1.53E-07
6E	30.1	203	9 14:45	2.32E-02	9.45E-02	9.45E-02	TH	2240	321.	1.43E-07
5E	31.8	202	9 14:45	1.98E-02	8.13E-02	8.13E-02	TH	2355	330.	1.33E-07
4E	33.4	202	9 14:45	1.58E-02	6.55E-02	6.55E-02	TH	2471	339.	1.23E-07
3E	35.1	202	9 14:45	1.21E-02	5.04E-02	5.04E-02	TH	2587	348.	1.13E-07
2E	36.8	201	9 14:45	8.43E-03	3.52E-02	3.52E-02	TH	2703	357.	1.05E-07
1E	38.6	201	9 14:45	2.33E-03	9.83E-03	9.83E-03	TH	2821	366.	9.79E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 14:51

STABILITY CLASS D

DATE: 83/01/19

ELEV: 4.6 MPH FROM 022 DEG

CURRENT PLUME INFORMATION AS OF 14:45 ON 83/01/19

ABBREVIATED PROJECTION

ID	MILE	DEG	SEC	TIME	DOSE RATE (MR/HR)		HIGH DOSE ORGAN 2.10*SIGMA		CHI/Q	
					WHOLE BODY	THYROID	DOSE RATE ID	Y	Z	
JULIAN DAY =	19									
27G	1.1	202	9	14:45	6.77E-15	8.96E-13	8.96E-13	TH 125	49.4	2.51E-05
28G	SB	202	9	14:45	1.16E-11	1.53E-12	1.53E-12	TH 91.5	0.0	1.30E-05
29G	2.4	205	9	14:45	2.10E-15	2.91E-13	2.91E-13	TH 224	74.6	8.24E-06
26G	3.6	208	9	14:45	4.25E-15	1.65E-13	1.65E-13	TH 330	97.0	4.73E-06
24G	4.7	208	9	14:45	8.38E-16	1.10E-13	1.10E-13	TH 423	114.	3.20E-06
23G	5.7	208	9	14:45	6.89E-16	9.11E-14	9.11E-14	TH 511	129.	2.66E-06
22G	6.7	207	9	14:45	5.63E-16	7.45E-14	7.45E-14	TH 660	153.	2.86E-06
22G	7.3	206	9	14:45	7.23E-16	9.56E-14	9.56E-14	TH 706	159.	1.90E-06
20G	8.1	205	9	14:45	4.76E-16	6.29E-14	6.29E-14	TH 767	168.	1.33E-06
19G	9.2	204	9	14:45	3.28E-16	4.34E-14	4.34E-14	TH 843	178.	9.47E-07
18G	10.4	203	9	14:45	2.30E-16	3.04E-14	3.04E-14	TH 934	190.	6.88E-07
18G	11.8	202	9	14:45	1.65E-16	2.18E-14	2.18E-14	TH 1039	203.	5.90E-07
18G	13.3	202	9	14:45	1.39E-16	1.84E-14	1.84E-14	TH 1141	215.	5.18E-07
15G	14.6	202	9	14:45	1.20E-16	1.59E-14	1.59E-14	TH 1241	226.	4.62E-07
18G	16.0	202	9	14:45	1.05E-16	1.39E-14	1.39E-14	TH 1338	237.	4.18E-07
13G	18.7	204	9	14:45	9.39E-17	1.24E-14	1.24E-14	TH 1526	256.	3.15E-07
12G	20.1	204	9	14:45	6.95E-17	9.18E-15	9.18E-15	TH 1627	266.	2.66E-07
11G	21.6	204	9	14:45	5.77E-17	7.63E-15	7.63E-15	TH 1734	276.	2.26E-07
10G	23.3	204	9	14:45	4.79E-17	6.34E-15	6.34E-15	TH 1848	287.	1.93E-07
10G	25.0	204	9	14:45	4.01E-17	5.30E-15	5.30E-15	TH 1967	298.	1.76E-07
8G	26.7	203	9	14:45	3.57E-17	4.72E-15	4.72E-15	TH 2086	308.	1.62E-07
7G	28.4	203	9	14:45	3.21E-17	4.24E-15	4.24E-15	TH 2203	318.	1.49E-07
6G	30.1	203	9	14:45	2.88E-17	3.82E-15	3.82E-15	TH 2319	327.	1.39E-07
5G	31.8	202	9	14:45	2.61E-17	3.46E-15	3.46E-15	TH 2433	337.	1.28E-07
4G	33.4	202	9	14:45	2.33E-17	3.08E-15	3.08E-15	TH 2549	346.	1.18E-07
3G	35.1	202	9	14:45	2.09E-17	2.76E-15	2.76E-15	TH 2664	354.	1.09E-07
2G	36.8	201	9	14:45	1.86E-17	2.46E-15	2.46E-15	TH 2781	363.	1.01E-07
1G	38.6	201	9	14:45	1.67E-17	2.21E-15	2.21E-15	TH 2878	0.0	9.62E-08
1G	40.0	201	9	15: 4	1.58E-17	2.09E-15	2.09E-15	TH 3551	0.0	6.93E-09
1G	50.0	201	9	17:15	1.14E-17	1.51E-15	1.51E-15			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 14:51

DATE: 03/01/19

ELEV: 4.6 MPH FROM 022 DEG

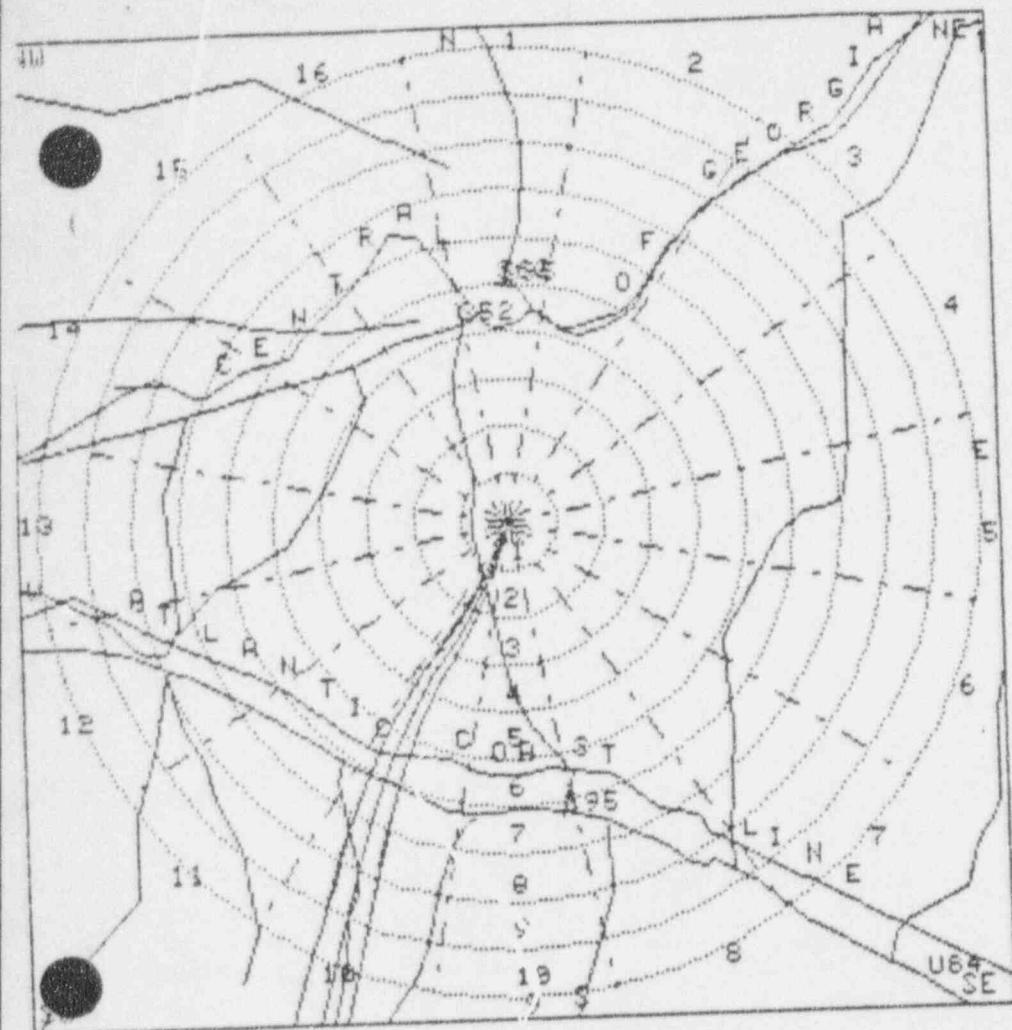
STABILITY CLASS D

CURRENT PLUME INFORMATION AS OF 14:45 ON 03/01/19  
ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q

ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JULIAN DAY	-	19											
20E	1.1	202	9	14:45	2.33E+02	1.30E+01	2.33E+02	WB	124.	48.2	5.44E-06		
21E	5B	202	9	14:45	1.87E+02	1.04E+01	1.87E+02	WB	90.8	0.0	4.35E-06		
22E	2.4	205	9	14:45	1.93E+02	1.09E+01	1.93E+02	WB	236.	76.5	4.40E-06		
23E	3.6	208	9	14:45	1.81E+02	1.03E+01	1.81E+02	WB	332.	96.9	4.04E-06		
24E	4.7	208	9	14:45	1.38E+02	7.95E+00	1.38E+02	WB	423.	114.	3.02E-06		
25E	5.7	208	9	14:45	1.14E+02	6.63E+00	1.14E+02	WB	500.	127.	2.44E-06		
26E	6.7	207	9	14:45	9.65E+01	5.65E+00	9.65E+01	WB	574.	139.	2.02E-06		
27E	7.3	206	9	14:45	1.28E+02	7.57E+00	1.28E+02	WB	620.	146.	2.62E-06		
28E	8.1	205	9	14:45	9.04E+01	5.39E+00	9.04E+01	WB	682.	155.	1.82E-06		
29E	9.2	204	9	14:45	6.42E+01	3.87E+00	6.42E+01	WB	759.	166.	1.27E-06		
30E	10.4	203	9	14:45	4.33E+01	2.63E+00	4.33E+01	WB	850.	179.	8.48E-07		
31E	11.8	202	9	14:45	3.13E+01	1.93E+00	3.13E+01	WB	956.	192.	6.09E-07		
32E	13.3	202	9	14:45	2.73E+01	1.70E+00	2.73E+01	WB	1059	205.	5.32E-07		
33E	14.6	202	9	14:45	2.37E+01	1.49E+00	2.37E+01	WB	1159	217.	4.73E-07		
34E	16.0	202	9	14:45	2.02E+01	1.28E+00	2.02E+01	WB	1257	228.	4.26E-07		
35E	18.7	201	9	14:45	1.45E+01	9.34E-01	1.45E+01	WB	1446	248.	3.51E-07		
36E	20.1	204	9	14:45	8.42E+00	5.49E-01	8.42E+00	WB	1547	258.	2.89E-07		
37E	21.6	204	9	14:45	1.85E+00	1.21E+01	1.21E+01	TH	1651	269.	2.44E-07		
38E	23.3	204	9	14:45	4.21E-02	1.66E-01	1.66E-01	TH	1768	279.	2.07E-07		
39E	25.0	204	9	14:45	3.48E-02	1.38E-01	1.38E-01	TH	1888	290.	1.77E-07		
40E	26.7	203	9	14:45	3.07E-02	1.23E-01	1.23E-01	TH	2007	301.	1.65E-07		
41E	28.4	203	9	14:45	2.69E-02	1.08E-01	1.08E-01	TH	2124	311.	1.53E-07		
42E	30.1	203	9	14:45	2.32E-02	9.45E-02	9.45E-02	TH	2240	321.	1.43E-07		
43E	31.8	202	9	14:45	1.98E-02	8.13E-02	8.13E-02	TH	2355	330.	1.33E-07		
44E	33.4	202	9	14:45	1.58E-02	6.55E-02	6.55E-02	TH	2471	339.	1.23E-07		
45E	35.1	202	9	14:45	1.21E-02	5.04E-02	5.04E-02	TH	2587	348.	1.13E-07		
46E	36.8	201	9	14:45	8.43E-03	3.52E-02	3.52E-02	TH	2703	357.	1.05E-07		
47E	38.6	201	9	14:45	2.33E-03	9.83E-03	9.83E-03	TH	2821	366.	9.79E-08		
48E	40.0	201	9	15: 4	2.22E-03	9.33E-03	9.33E-03	TH	2918	0.0	9.29E-08		
49E	50.0	201	9	17:15	1.61E-03	6.77E-03	6.77E-03	TH	3590	0.0	6.74E-08		



ACTUAL INCIDENT  
 FARLEY NUCLEAR PLANT  
 DATE: 83/01/14 -DAY- TIME: 14:51  
 ELEV: 4.6 MPH FROM 022 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 14:45

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 15:06  
STABILITY CLASS D

DATE: 03/01/19

ELEV: 2.5 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 15:00 ON 03/01/19  
PRESENT LOCATIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC SEC	TIME	WHOLE BODY	THYROID	DOSE RATE ID	Y	Z		
JULIAN DAY = 19										
28G	.6	196	9 15: 0	2.98E-14	4.04E-12	4.04E-12	TH	75.0	34.2	1.12E-04
28G	SB	196	9 15: 4	2.12E-14	2.87E-12	2.87E-12	TH	91.5	0.0	8.02E-05
28G	1.8	200	9 15: 0	5.94E-15	8.07E-13	8.07E-13	TH	132.	51.5	2.27E-05
28G	3.0	203	9 15: 0	2.03E-15	2.75E-13	2.75E-13	TH	232.	76.2	7.82E-06
28G	4.2	206	9 15: 0	1.17E-15	1.59E-13	1.59E-13	TH	337.	98.4	4.57E-06
28G	5.3	207	9 15: 0	7.93E-16	1.07E-13	1.07E-13	TH	518.	130.	2.61E-06
28G	6.3	207	9 15: 0	6.56E-16	8.89E-14	8.89E-14	TH	591.	143.	2.16E-06
28G	7.3	206	9 15: 0	5.37E-16	7.29E-14	7.29E-14	TH	667.	154.	2.81E-06
28G	7.9	205	9 15: 0	6.91E-16	9.38E-14	9.38E-14	TH	712.	160.	1.87E-06
28G	8.7	205	9 15: 0	4.55E-16	6.18E-14	6.18E-14	TH	773.	169.	1.31E-06
28G	9.8	204	9 15: 0	3.14E-16	4.26E-14	4.26E-14	TH	849.	179.	9.36E-07
18G	11.0	203	9 15: 0	2.21E-16	3.00E-14	3.00E-14	TH	940.	191.	6.81E-07
18G	12.4	202	9 15: 0	1.34E-16	1.82E-14	1.82E-14	TH	1045	204.	5.85E-07
18G	13.9	202	9 15: 0	1.16E-16	1.57E-14	1.57E-14	TH	1147	216.	5.13E-07
18G	15.3	202	9 15: 0	1.01E-16	1.38E-14	1.38E-14	TH	1217	227.	4.58E-07
18G	16.6	202	9 15: 0	9.05E-17	1.22E-14	1.22E-14	TH	1344	237.	3.13E-07
18G	19.3	204	9 15: 0	6.70E-17	9.09E-15	9.09E-15	TH	1532	257.	2.65E-07
12G	20.7	204	9 15: 0	5.57E-17	7.56E-15	7.56E-15	TH	1633	267.	2.25E-07
18G	22.2	204	9 15: 0	4.63E-17	6.28E-15	6.28E-15	TH	1740	277.	1.92E-07
18G	23.9	204	9 15: 0	3.87E-17	5.25E-15	5.25E-15	TH	1853	287.	1.75E-07
9G	25.6	204	9 15: 0	3.45E-17	4.68E-15	4.68E-15	TH	1973	298.	1.61E-07
8G	27.3	203	9 15: 0	3.10E-17	4.21E-15	4.21E-15	TH	2092	308.	1.49E-07
7G	29.0	203	9 15: 0	2.79E-17	3.79E-15	3.79E-15	TH	2209	318.	1.39E-07
6G	30.7	203	9 15: 0	2.53E-17	3.43E-15	3.43E-15	TH	2324	328.	1.27E-07
5G	32.4	202	9 15: 0	2.25E-17	3.06E-15	3.06E-15	TH	2439	337.	1.18E-07
4G	34.1	202	9 15: 0	2.02E-17	2.74E-15	2.74E-15	TH	2554	346.	1.09E-07
3G	35.8	202	9 15: 0	1.80E-17	2.45E-15	2.45E-15	TH	2670	355.	1.01E-07
2G	37.5	201	9 15: 0	1.62E-17	2.19E-15	2.19E-15	TH	2787	364.	1.01E-07
1G	39.2	201	9 15: 0							

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 15:06

DATE: 83/01/19

STABILITY CLASS D

ELEV: 2.5 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 15:00 ON 83/01/19  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	WB	TH	Y	Z
JULIAN DAY = 19											
28E	.6	196	9	15: 0	4.21E+01	2.44E+00	4.21E+01	WB	74.2	32.5	1.04E-06
28E	SB	196	9	15: 4	1.05E+02	6.08E+00	1.05E+02	WB	90.8	0.0	2.60E-06
29E	1.8	200	9	15: 0	2.25E+02	1.32E+01	2.25E+02	WB	179.	62.9	5.51E-06
28E	3.0	203	9	15: 0	1.95E+02	1.15E+01	1.95E+02	WB	287.	87.6	4.67E-06
25E	4.2	206	9	15: 0	1.48E+02	8.85E+00	1.48E+02	WB	381.	106.	3.48E-06
29E	5.3	207	9	15: 0	1.03E+02	6.20E+00	1.03E+02	WB	470.	122.	2.37E-06
23E	6.3	207	9	15: 0	9.40E+01	5.69E+00	9.40E+01	WB	547.	135.	2.10E-06
23E	7.3	206	9	15: 0	8.40E+01	5.13E+00	8.40E+01	WB	620.	146.	1.84E-06
21E	7.9	205	9	15: 0	1.10E+02	6.82E+00	1.10E+02	WB	666.	153.	2.37E-06
21E	8.7	205	9	15: 0	7.82E+01	4.87E+00	7.82E+01	WB	728.	162.	1.65E-06
19E	9.8	204	9	15: 0	5.59E+01	3.52E+00	5.59E+01	WB	804.	173.	1.16E-06
18E	11.0	203	9	15: 0	3.82E+01	2.43E+00	3.82E+01	WB	895.	185.	7.84E-07
19E	12.4	202	9	15: 0	2.79E+01	1.79E+00	2.79E+01	WB	1001	198.	5.68E-07
18E	13.9	202	9	15: 0	2.45E+01	1.59E+00	2.45E+01	WB	1103	210.	5.00E-07
15E	15.3	202	9	15: 0	2.14E+01	1.41E+00	2.14E+01	WB	1203	222.	4.46E-07
19E	16.6	202	9	15: 0	1.83E+01	1.21E+00	1.83E+01	WB	1300	232.	4.04E-07
13E	19.3	204	9	15: 0	1.32E+01	8.90E-01	1.32E+01	WB	1489	252.	3.35E-07
12E	20.7	204	9	15: 0	7.71E+00	5.24E-01	7.71E+00	WB	1590	262.	2.77E-07
15E	22.2	204	9	15: 0	1.70E+00	1.16E+01	1.16E+01	TH	1697	273.	2.35E-07
11E	23.9	204	9	15: 0	3.87E-02	1.60E-01	1.60E-01	TH	1811	283.	2.00E-07
9E	25.6	204	9	15: 0	3.21E-02	1.33E-01	1.33E-01	TH	1931	294.	1.71E-07
8E	27.3	203	9	15: 0	2.84E-02	1.19E-01	1.19E-01	TH	2049	305.	1.60E-07
7E	29.0	203	9	15: 0	2.49E-02	1.05E-01	1.05E-01	TH	2166	315.	1.48E-07
6E	30.7	203	9	15: 0	2.15E-02	9.15E-02	9.15E-02	TH	2282	324.	1.39E-07
5E	32.4	202	9	15: 0	1.84E-02	7.88E-02	7.88E-02	TH	2397	333.	1.30E-07
4E	34.1	202	9	15: 0	1.47E-02	6.36E-02	6.36E-02	TH	2512	343.	1.19E-07
3E	35.8	202	9	15: 0	1.13E-02	4.90E-02	4.90E-02	TH	2628	352.	1.11E-07
2E	37.5	201	9	15: 0	7.86E-03	3.42E-02	3.42E-02	TH	2745	360.	1.02E-07
1E	39.2	201	9	15: 0	2.18E-03	9.58E-03	9.58E-03	TH	2863	369.	9.57E-08

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 15:07

DATE: 03/01/19

STABILITY CLASS D

ELEV: 2.5 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 15:00 ON 03/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z
JULIAN DAY = 19										
28G	.6	196	9	15: 0	2.98E-14	4.04E-12	4.04E-12	TH	75.0	34.2
28G	SB	196	9	15: 4	2.12E-14	2.87E-12	2.87E-12	TH	91.5	0.0
28G	1.8	200	9	15: 0	5.94E-15	8.07E-13	8.07E-13	TH	132.	51.5
28G	3.0	203	9	15: 0	2.03E-15	2.75E-13	2.75E-13	TH	232.	76.2
28G	4.2	206	9	15: 0	1.17E-15	1.59E-13	1.59E-13	TH	337.	98.4
28G	5.3	207	9	15: 0	7.93E-16	1.07E-13	1.07E-13	TH	429.	115.
28G	6.3	207	9	15: 0	6.56E-16	8.89E-14	8.89E-14	TH	518.	130.
28G	7.3	206	9	15: 0	5.37E-16	7.29E-14	7.29E-14	TH	591.	143.
28G	7.9	205	9	15: 0	6.91E-16	9.38E-14	9.38E-14	TH	667.	154.
28G	8.7	205	9	15: 0	4.55E-16	6.18E-14	6.18E-14	TH	712.	160.
28G	9.8	204	9	15: 0	3.14E-16	4.26E-14	4.26E-14	TH	773.	169.
18G	11.0	203	9	15: 0	2.21E-16	3.00E-14	3.00E-14	TH	849.	179.
18G	12.4	202	9	15: 0	1.58E-16	2.15E-14	2.15E-14	TH	940.	191.
18G	13.9	202	9	15: 0	1.34E-16	1.82E-14	1.82E-14	TH	1045	204.
18G	15.3	202	9	15: 0	1.16E-16	1.57E-14	1.57E-14	TH	1147	216.
18G	16.6	202	9	15: 0	1.01E-16	1.38E-14	1.38E-14	TH	1247	227.
18G	19.3	204	9	15: 0	9.05E-17	1.22E-14	1.22E-14	TH	1344	237.
12G	20.7	204	9	15: 0	6.70E-17	9.09E-15	9.09E-15	TH	1532	257.
18G	22.2	204	9	15: 0	5.57E-17	7.56E-15	7.56E-15	TH	1633	267.
18G	23.9	204	9	15: 0	4.63E-17	6.28E-15	6.28E-15	TH	1740	277.
9G	25.6	204	9	15: 0	3.87E-17	5.25E-15	5.25E-15	TH	1853	287.
8G	27.3	203	9	15: 0	3.45E-17	4.68E-15	4.68E-15	TH	1973	298.
7G	29.0	203	9	15: 0	3.10E-17	4.21E-15	4.21E-15	TH	2092	308.
6G	30.7	203	9	15: 0	2.79E-17	3.79E-15	3.79E-15	TH	2209	318.
5G	32.4	202	9	15: 0	2.53E-17	3.43E-15	3.43E-15	TH	2324	328.
4G	34.1	202	9	15: 0	2.25E-17	3.06E-15	3.06E-15	TH	2439	337.
3G	35.8	202	9	15: 0	2.02E-17	2.74E-15	2.74E-15	TH	2554	346.
2G	37.5	201	9	15: 0	1.80E-17	2.45E-15	2.45E-15	TH	2670	355.
1G	39.2	201	9	15: 0	1.62E-17	2.19E-15	2.19E-15	TH	2787	364.
1G	40.0	201	9	15:20	1.57E-17	2.13E-15	2.13E-15	TH	2842	0.0
1G	50.0	200	9	19:24	1.12E-17	1.53E-15	1.53E-15	TH	3515	0.0

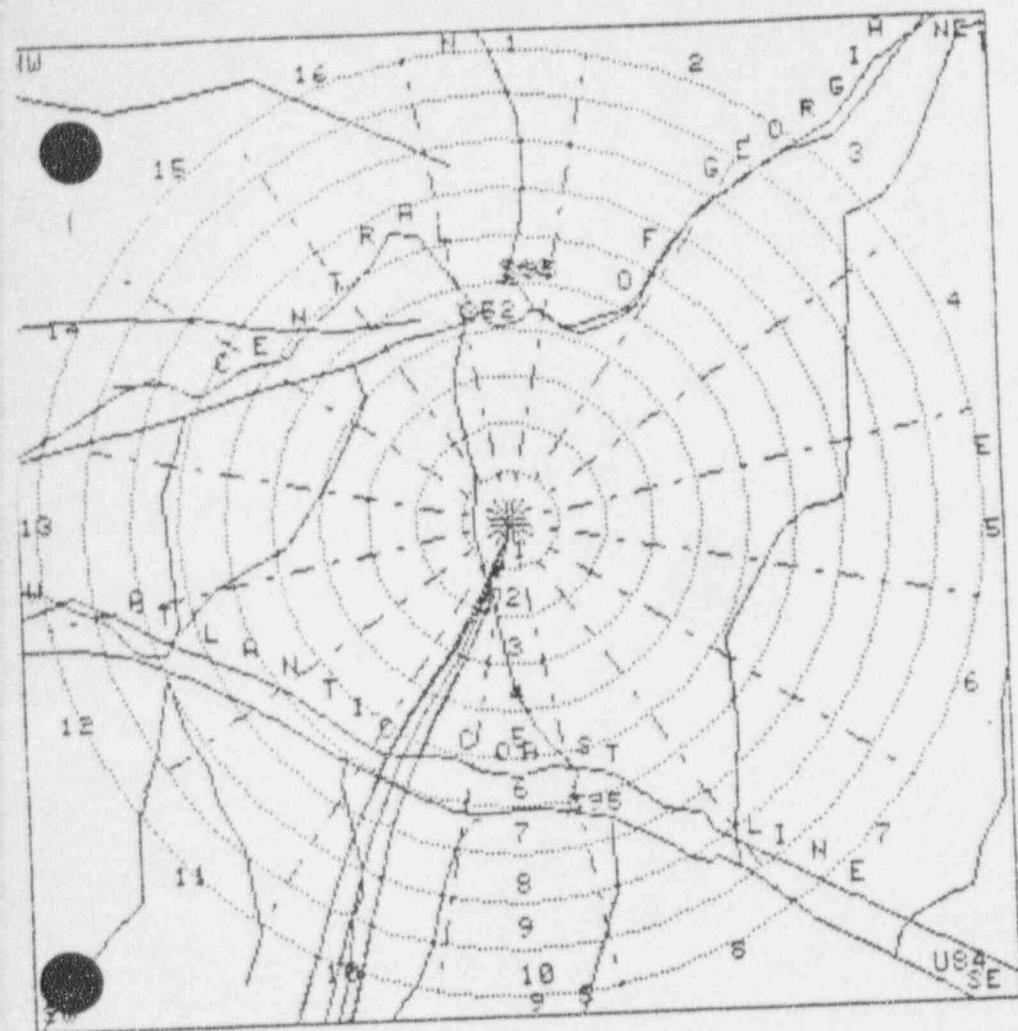
ACTUAL INCIDENT  
FARLEY NUCLEAR PLANTTIME: 15:07  
STABILITY CLASS D

DATE: 83/01/19

ELEV: 2.5 MPH FROM 016 DEG

CURRENT PLUME INFORMATION AS OF 15:00 ON 83/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHJ/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	WB	TH	Y	Z
JULIAN DAY = 19											
28E	.6	196	9	15: 0	4.21E+01	2.44E+00	4.21E+01	WB	74.2	32.5	1.04E-06
28E	SB	196	9	15: 4	1.05E+02	6.08E+00	1.05E+02	WB	90.8	0.0	2.60E-06
29E	1.8	200	9	15: 0	2.25E+02	1.32E+01	2.25E+02	WB	179.	62.9	5.51E-06
29E	3.0	203	9	15: 0	1.95E+02	1.15E+01	1.95E+02	WB	287.	87.6	4.67E-06
29E	4.2	206	9	15: 0	1.48E+02	8.85E+00	1.48E+02	WB	381.	106.	3.48E-06
29E	5.3	207	9	15: 0	1.03E+02	6.20E+00	1.03E+02	WB	470.	122.	2.37E-06
29E	6.3	207	9	15: 0	9.40E+01	5.69E+00	9.40E+01	WB	547.	135.	2.10E-06
29E	7.3	206	9	15: 0	8.40E+01	5.13E+00	8.40E+01	WB	620.	146.	1.84E-06
29E	7.9	205	9	15: 0	1.10E+02	6.82E+00	1.10E+02	WB	666.	153.	2.37E-06
29E	8.7	205	9	15: 0	7.82E+01	4.87E+00	7.82E+01	WB	728.	162.	1.65E-06
19E	9.8	204	9	15: 0	5.59E+01	3.52E+00	5.59E+01	WB	804.	173.	1.16E-06
18E	11.0	203	9	15: 0	3.82E+01	2.43E+00	3.82E+01	WB	895.	185.	7.84E-07
18E	12.4	202	9	15: 0	2.79E+01	1.79E+00	2.79E+01	WB	1003	198.	5.68E-07
18E	13.9	202	9	15: 0	2.45E+01	1.59E+00	2.45E+01	WB	1103	210.	5.00E-07
18E	15.3	202	9	15: 0	2.14E+01	1.41E+00	2.14E+01	WB	1203	222.	4.04E-07
18E	16.6	202	9	15: 0	1.83E+01	1.21E+00	1.83E+01	WB	1300	232.	3.35E-07
18E	19.3	204	9	15: 0	1.32E+01	8.90E-01	1.32E+01	WB	1489	252.	2.77E-07
12E	20.7	204	9	15: 0	7.71E+00	5.24E-01	7.71E+00	WB	1590	262.	2.35E-07
12E	22.2	204	9	15: 0	1.70E+00	1.16E+01	1.16E+01	TH	1697	273.	2.00E-07
12E	23.9	204	9	15: 0	3.87E-02	1.60E-01	1.60E-01	TH	1811	283.	1.71E-07
9E	25.6	204	9	15: 0	3.21E-02	1.33E-01	1.33E-01	TH	1931	294.	1.60E-07
8E	27.3	203	9	15: 0	2.84E-02	1.19E-01	1.19E-01	TH	2049	305.	1.48E-07
7E	29.0	203	9	15: 0	2.49E-02	1.05E-01	1.05E-01	TH	2166	315.	1.39E-07
6E	30.7	203	9	15: 0	2.15E-02	9.15E-02	9.15E-02	TH	2282	324.	1.30E-07
5E	32.4	202	9	15: 0	1.84E-02	7.88E-02	7.88E-02	TH	2397	333.	1.19E-07
4E	34.1	202	9	15: 0	1.47E-02	6.36E-02	6.36E-02	TH	2512	343.	1.11E-07
3E	35.8	202	9	15: 0	1.13E-02	4.90E-02	4.90E-02	TH	2628	352.	1.02E-07
2E	37.5	201	9	15: 0	7.86E-03	3.42E-02	3.42E-02	TH	2745	360.	9.57E-08
1E	39.2	201	9	15: 0	2.18E-03	9.58E-03	9.58E-03	TH	2863	369.	9.29E-08
1E	40.0	201	9	15:20	2.11E-03	9.30E-03	9.30E-03	TH	2918	0.0	6.74E-08
1E	50.0	200	9	19:24	1.53E-03	6.75E-03	6.75E-03	TH	3590	0.0	



ACTUAL INCIDENT  
 FARLEY NUCLEAR PLANT  
 DATE: 83/01/14 -DAY- TIME: 15:06  
 ELEV: 2.5 MPH FROM 016 DEG, CLASS D  
 DATE: 83/01/14 -PLUME- TIME: 15:00

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

JINTER CHOICE:

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 15:20

DATE: 03/01/19

STABILITY CLASS D

ELEV: 3.9 MPH FROM 010 DEG

CURRENT PLUME INFORMATION AS OF 15:15 ON 03/01/19

PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14%SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEC	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	Y	Z
JULIAN DAY = 19									
18G	1.0	190	8	15:15	9.84E-15	1.36E-12	1.36E-12	TH	108.
29G	5B	190	8	15:15	1.32E-14	1.84E-12	1.84E-12	TH	91.5
28G	1.6	192	9	15:15	5.66E-15	7.88E-13	7.88E-13	TH	194.
29G	2.7	196	9	15:15	2.01E-15	2.80E-13	2.80E-13	TH	246.
26G	4.0	200	9	15:15	1.03E-15	1.44E-13	1.44E-13	TH	339.
25G	5.1	203	9	15:15	7.29E-16	1.01E-13	1.01E-13	TH	531.
24G	6.3	204	9	15:15	5.43E-16	7.54E-14	7.54E-14	TH	610.
23G	7.3	205	9	15:15	4.76E-16	6.63E-14	6.63E-14	TH	693.
21G	8.2	204	9	15:15	4.06E-16	5.65E-14	5.65E-14	TH	764.
22G	8.9	204	9	15:15	5.37E-16	7.47E-14	7.47E-14	TH	810.
20G	9.7	203	9	15:15	3.59E-16	4.99E-14	4.99E-14	TH	870.
19G	10.7	202	9	15:15	2.52E-16	3.51E-14	3.51E-14	TH	945.
18G	11.9	202	9	15:15	1.80E-16	2.51E-14	2.51E-14	TH	1036
18G	13.4	201	9	15:15	1.31E-16	1.83E-14	1.83E-14	TH	1140
16G	14.8	201	9	15:15	1.13E-16	1.57E-14	1.57E-14	TH	1241
15G	16.2	201	9	15:15	9.93E-17	1.38E-14	1.38E-14	TH	1340
14G	17.6	202	9	15:15	8.81E-17	1.22E-14	1.22E-14	TH	1437
13G	20.2	203	9	15:15	7.91E-17	1.10E-14	1.10E-14	TH	1624
2G	21.7	203	9	15:15	5.94E-17	8.26E-15	8.26E-15	TH	1725
3	23.2	203	9	15:15	4.96E-17	6.90E-15	6.90E-15	TH	1831
10G	24.8	203	9	15:15	4.15E-17	5.77E-15	5.77E-15	TH	1945
9G	26.6	203	9	15:15	3.49E-17	4.85E-15	4.85E-15	TH	2064
8G	28.3	203	9	15:15	3.12E-17	4.34E-15	4.34E-15	TH	2182
7G	30.0	203	9	15:15	2.82E-17	3.92E-15	3.92E-15	TH	2299
6G	31.7	202	9	15:15	2.55E-17	3.54E-15	3.54E-15	TH	2415
5G	33.3	202	9	15:15	2.31E-17	3.22E-15	3.22E-15	TH	2529
4G	35.0	202	9	15:15	2.07E-17	2.88E-15	2.88E-15	TH	2644
3G	36.7	201	9	15:15	1.86E-17	2.58E-15	2.58E-15	TH	2760
2G	38.4	201	9	15:15	1.66E-17	2.31E-15	2.31E-15	TH	2876
1G	40.1	201	9	15:15	1.49E-17	2.08E-15	2.08E-15	TH	370.

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 15:20  
STABILITY CLASS D

DATE: 83/01/19

ELEV: 3.9 MPH FROM 010 DEG

CURRENT PLUME INFORMATION AS OF 15:15 ON 83/01/19  
PRESENT LOCATION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
ID MILE DEG SEC TIME WHOLE BODY THYROID DOSE RATE ID Y Z

JULIAN DAY	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
29E	1.0	190	8	15:15	2.56E+01	1.53E+00	2.56E+01	WB	103.	43.3	6.81E-07
29E	SB	190	8	15:15	1.22E+02	7.31E+00	1.22E+02	WB	90.8	0.0	3.24E-06
28E	1.6	192	9	15:15	1.38E+02	8.35E+00	1.38E+02	WB	163.	58.9	3.58E-06
28E	2.7	196	9	15:15	1.65E+02	1.01E+01	1.65E+02	WB	261.	82.0	4.23E-06
28E	4.0	200	9	15:15	1.30E+02	8.03E+00	1.30E+02	WB	364.	103.	3.26E-06
28E	5.1	203	9	15:15	9.87E+01	6.12E+00	9.87E+01	WB	456.	120.	2.42E-06
28E	6.3	204	9	15:15	7.80E+01	4.88E+00	7.80E+01	WB	544.	134.	1.87E-06
28E	7.3	205	9	15:15	7.62E+01	4.81E+00	7.62E+01	WB	620.	146.	1.78E-06
28E	8.2	204	9	15:15	6.77E+01	4.32E+00	6.77E+01	WB	693.	157.	1.55E-06
28E	8.9	204	9	15:15	9.11E+01	5.87E+00	9.11E+01	WB	738.	161.	2.04E-06
28E	9.7	203	9	15:15	6.48E+01	4.21E+00	6.48E+01	WB	799.	172.	9.77E-07
28E	10.7	202	9	15:15	4.48E+01	2.94E+00	4.48E+01	WB	875.	182.	7.00E-07
18E	11.9	202	9	15:15	3.25E+01	2.16E+00	3.25E+01	WB	965.	194.	5.13E-07
18E	13.4	201	9	15:15	2.40E+01	1.61E+00	2.40E+01	WB	1070	206.	4.55E-07
18E	14.8	201	9	15:15	2.13E+01	1.44E+00	2.13E+01	WB	1172	218.	4.10E-07
18E	16.2	201	9	15:15	1.88E+01	1.29E+00	1.88E+01	WB	1272	229.	3.74E-07
18E	17.6	202	9	15:15	1.61E+01	1.12E+00	1.61E+01	WB	1369	240.	3.07E-07
18E	20.2	203	9	15:15	1.15E+01	8.13E-01	1.15E+01	WB	1557	259.	2.60E-07
18E	21.7	203	9	15:15	6.90E+00	4.91E-01	6.90E+00	WB	1657	269.	2.22E-07
18E	23.2	203	9	15:15	1.53E+00	1.09E+01	1.09E+01	TH	1764	279.	1.89E-07
10E	24.8	203	9	15:15	3.50E-02	1.50E-01	1.50E-01	TH	1878	289.	1.63E-07
9E	26.6	203	9	15:15	2.91E-02	1.26E-01	1.26E-01	TH	1997	300.	1.52E-07
8E	28.3	203	9	15:15	2.58E-02	1.13E-01	1.13E-01	TH	2116	310.	1.41E-07
7E	30.0	203	9	15:15	2.27E-02	1.00E-01	1.00E-01	TH	2233	320.	1.33E-07
6E	31.7	202	9	15:15	1.96E-02	8.72E-02	8.72E-02	TH	2349	330.	1.24E-07
5E	33.3	202	9	15:15	1.68E-02	7.53E-02	7.53E-02	TH	2463	339.	1.15E-07
4E	35.0	202	9	15:15	1.35E-02	6.09E-02	6.09E-02	TH	2578	348.	1.06E-07
3E	36.7	201	9	15:15	1.03E-02	4.70E-02	4.70E-02	TH	2694	356.	9.90E-08
2E	38.4	201	9	15:15	7.23E-03	3.29E-02	3.29E-02	TH	2811	365.	9.24E-09
1E	40.1	201	9	15:15	2.01E-03	9.22E-03	9.22E-03	TH	2929	374.	

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 15:21

DATE: 03/01/19

STABILITY CLASS D

ELEV: 3.9 MPH FROM 010 DEG

CURRENT PLUME INFORMATION AS OF 15:15 ON 03/01/19  
ABBREVIATED PROJECTIONDOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	DOSE RATE	ID	Y	Z	
JULIAN DAY = 19											
29G	1.0	190	8	15:15	9.84E-15	1.36E-12	1.36E-12	TH	108.	44.6	3.79E-05
29G	SB	190	8	15:15	1.32E-14	1.84E-12	1.84E-12	TH	91.5	0.0	5.10E-05
28G	1.6	192	9	15:15	5.66E-15	7.88E-13	7.88E-13	TH	194.	67.4	2.20E-05
28G	2.7	196	9	15:15	2.01E-15	2.80E-13	2.80E-13	TH	246.	79.5	7.93E-06
28G	4.0	200	9	15:15	1.03E-15	1.44E-13	1.44E-13	TH	339.	98.9	4.12E-06
25G	5.1	203	9	15:15	7.29E-16	1.01E-13	1.01E-13	TH	531.	133.	2.19E-06
29G	6.3	204	9	15:15	5.43E-16	7.54E-14	7.54E-14	TH	618.	146.	1.95E-06
23G	7.3	205	9	15:15	4.76E-16	6.63E-14	6.63E-14	TH	693.	157.	1.68E-06
22G	8.2	204	9	15:15	4.06E-16	5.65E-14	5.65E-14	TH	764.	167.	2.25E-06
21G	8.9	204	9	15:15	5.37E-16	7.47E-14	7.47E-14	TH	810.	174.	1.52E-06
20G	9.7	203	9	15:15	3.59E-16	4.99E-14	4.99E-14	TH	870.	182.	1.08E-06
38G	10.7	202	9	15:15	2.52E-16	3.51E-14	3.51E-14	TH	945.	191.	7.87E-07
18G	11.9	202	9	15:15	1.80E-16	2.51E-14	2.51E-14	TH	1036	202.	5.82E-07
18G	13.4	201	9	15:15	1.31E-16	1.83E-14	1.83E-14	TH	1140	215.	5.09E-07
16G	14.8	201	9	15:15	1.13E-16	1.57E-14	1.57E-14	TH	1241	226.	4.52E-07
15G	16.2	201	9	15:15	9.93E-17	1.38E-14	1.38E-14	TH	1340	237.	4.08E-07
19G	17.6	202	9	15:15	8.81E-17	1.22E-14	1.22E-14	TH	1437	247.	3.73E-07
13G	20.2	203	9	15:15	7.91E-17	1.10E-14	1.10E-14	TH	1624	266.	2.85E-07
12G	21.7	203	9	15:15	5.94E-17	8.26E-15	8.26E-15	TH	1725	275.	2.43E-07
12G	23.2	203	9	15:15	4.96E-17	6.90E-15	6.90E-15	TH	1831	285.	2.07E-07
10G	24.8	203	9	15:15	4.15E-17	5.77E-15	5.77E-15	TH	1945	296.	1.78E-07
9G	26.6	203	9	15:15	3.49E-17	4.85E-15	4.85E-15	TH	2064	306.	1.63E-07
8G	28.3	203	9	15:15	3.12E-17	4.34E-15	4.34E-15	TH	2182	316.	1.51E-07
7G	30.0	203	9	15:15	2.82E-17	3.92E-15	3.92E-15	TH	2299	326.	1.40E-07
6G	31.7	202	9	15:15	2.55E-17	3.54E-15	3.54E-15	TH	2415	335.	1.31E-07
5G	33.3	202	9	15:15	2.31E-17	3.22E-15	3.22E-15	TH	2529	344.	1.20E-07
4G	35.0	202	9	15:15	2.07E-17	2.88E-15	2.88E-15	TH	2644	353.	1.11E-07
3G	36.7	201	9	15:15	1.86E-17	2.58E-15	2.58E-15	TH	2760	362.	1.03E-07
2G	38.4	201	9	15:15	1.66E-17	2.31E-15	2.31E-15	TH	2876	370.	9.63E-08
1G	40.1	201	9	15:15	1.49E-17	2.08E-15	2.08E-15	TH	3549	0.0	6.94E-08
1G	50.0	198	9	17:50	1.08E-17	1.50E-15	1.50E-15	TH			

ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

TIME: 15:21

DATE: 03/01/19

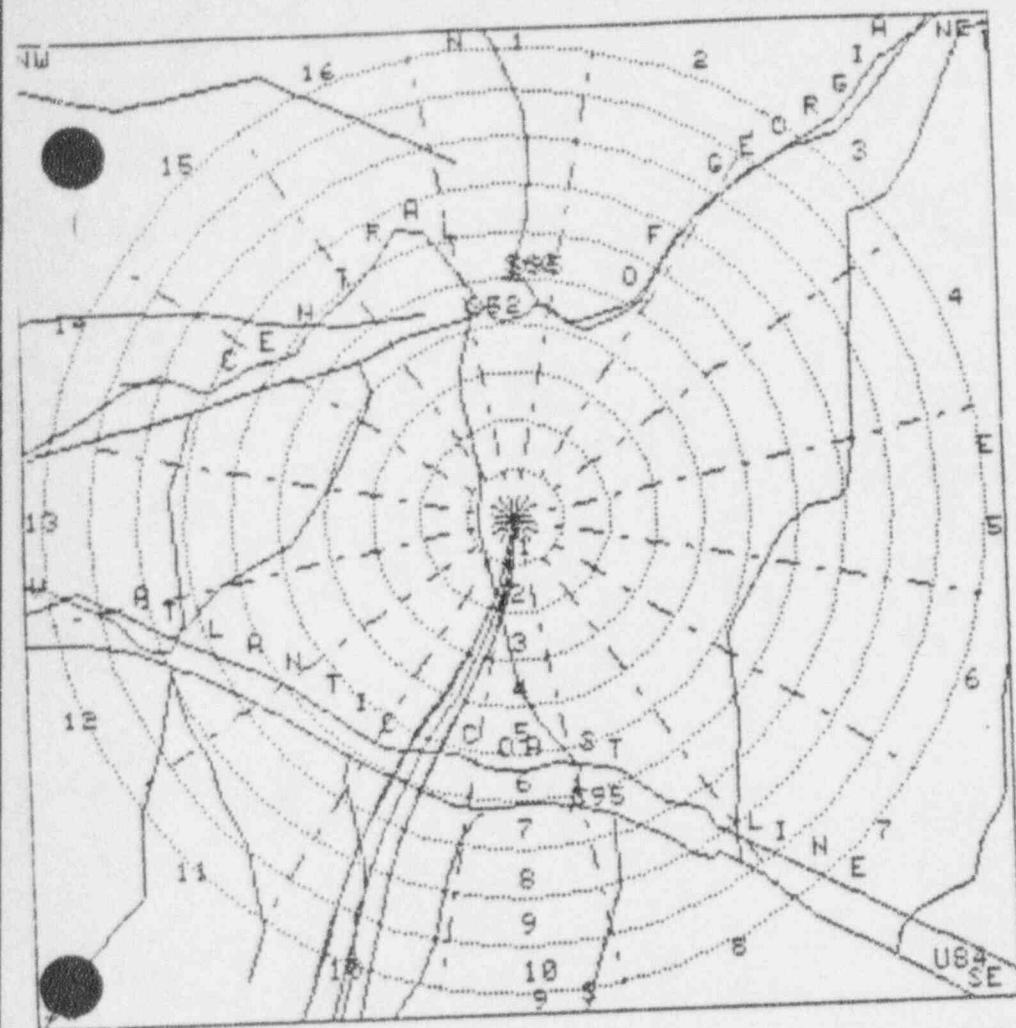
STABILITY CLASS D

ELEV: 3.9 MPH FROM 010 DEG

CURRENT PLUME INFORMATION AS OF 15:15 ON 03/01/19  
ABBREVIATED PROJECTION

DOSE RATE (MR/HR) HIGH DOSE ORGAN 2.14\*SIGMA CHI/Q  
DOSE RATE ID Y Z

ID	MILE	DEG	SEC	TIME	WHOLE BODY	THYROID	WB	108.	43.3	6.81E-07	
28E	1.0	190	0	15:15	2.56E+01	1.53E+00	2.56E+01	WB	90.0	0.0	3.24E-06
29E	SB	190	0	15:15	1.22E+02	7.31E+00	1.22E+02	WB	163.	58.9	3.58E-06
28E	1.6	192	9	15:15	1.38E+02	8.35E+00	1.38E+02	WB	261.	82.0	4.23E-06
29E	2.7	196	9	15:15	1.65E+02	1.01E+01	1.65E+02	WB	364.	103.	3.26E-06
28E	4.0	200	9	15:15	1.30E+02	8.03E+00	1.30E+02	WB	456.	120.	2.42E-06
28E	5.1	203	9	15:15	9.87E+01	6.12E+00	9.87E+01	WB	544.	134.	1.87E-06
28E	6.3	204	9	15:15	7.80E+01	4.88E+00	7.80E+01	WB	620.	146.	1.78E-06
28E	7.3	205	9	15:15	7.62E+01	4.81E+00	7.62E+01	WB	693.	157.	1.55E-06
28E	8.2	204	9	15:15	6.77E+01	4.32E+00	6.77E+01	WB	738.	164.	2.04E-06
28E	8.9	204	9	15:15	9.11E+01	5.87E+00	9.11E+01	WB	799.	172.	1.43E-06
28E	9.7	203	9	15:15	6.48E+01	4.21E+00	6.48E+01	WB	875.	182.	9.77E-07
28E	10.7	202	9	15:15	4.48E+01	2.94E+00	4.48E+01	WB	965.	194.	7.00E-07
18E	11.9	202	9	15:15	3.25E+01	2.16E+00	3.25E+01	WB	1070.	206.	5.13E-07
18E	13.4	201	9	15:15	2.40E+01	1.61E+00	2.40E+01	WB	1172.	218.	4.55E-07
18E	14.8	201	9	15:15	2.13E+01	1.44E+00	2.13E+01	WB	1272.	229.	4.10E-07
18E	16.2	201	9	15:15	1.90E+01	1.29E+00	1.98E+01	WB	1369.	240.	3.74E-07
18E	17.6	202	9	15:15	1.64E+01	1.12E+00	1.61E+01	WB	1557.	259.	3.07E-07
18E	20.2	203	9	15:15	1.15E+01	8.13E-01	1.15E+01	WB	1657.	269.	2.60E-07
18E	21.7	203	9	15:15	6.90E+00	4.91E-01	6.90E+00	WB	1764.	279.	2.22E-07
18E	23.2	203	9	15:15	1.53E+00	1.09E+01	1.09E+01	TH	1878.	289.	1.89E-07
18E	24.8	203	9	15:15	3.50E-02	1.50E-01	1.50E-01	TH	1997.	300.	1.63E-07
9E	26.6	203	9	15:15	2.91E-02	1.26E-01	1.26E-01	TH	2116.	310.	1.52E-07
8E	28.3	203	9	15:15	2.58E-02	1.13E-01	1.13E-01	TH	2233.	320.	1.41E-07
7E	30.0	203	9	15:15	2.27E-02	1.00E-01	1.00E-01	TH	2349.	330.	1.33E-07
6E	31.7	202	9	15:15	1.96E-02	8.72E-02	8.72E-02	TH	2463.	339.	1.24E-07
5E	33.3	202	9	15:15	1.68E-02	7.53E-02	7.53E-02	TH	2578.	348.	1.15E-07
4E	35.0	202	9	15:15	1.35E-02	6.09E-02	6.09E-02	TH	2694.	356.	1.06E-07
3E	36.7	201	9	15:15	1.03E-02	4.70E-02	4.70E-02	TH	2811.	365.	9.90E-08
2E	38.4	201	9	15:15	7.23E-03	3.29E-02	3.29E-02	TH	2928.	374.	9.24E-08
1E	40.1	201	9	15:15	2.01E-03	9.22E-03	9.22E-03	TH	3601.	0.0	6.71E-08
1E	50.0	198	9	17:50	1.46E-03	6.70E-03	6.70E-03	TH			



ACTUAL INCIDENT  
FARLEY NUCLEAR PLANT

DATE: 83/01/14 -DAY- TIME: 15:23  
ELEV: 3.9 MPH FROM 010 DEG, CLASS D  
DATE: 83/01/14 -PLUME- TIME: 15:15

ROADS AND RAILROADS	
TOGGLE	STATUS
1. FEDERAL ROADS	ON
2. STATE ROADS	ON
3. COUNTY ROADS	ON
4. RAILROADS	ON
5. ALL ON	
6. ALL OFF	
7. EXIT	

ENTER CHOICE:

## PLANT VENT STACK ACTIVITY

(CTMT PURGE ACTIVITY [CONC.]  
= PVS conc x 20)

FAILED FUEL  
ELAPSED TIME - 7.5 MINUTES  
Release Rate -  $1.4100E-06$   
Stack flow - 78000 CFM  
ISOTOPE  $\mu\text{Ci}/\text{ML}$  in PVS  
KR-005 9.266E-06  
KR-05M 4.160E-04  
KR-07 6.97E-04  
KR-08 1.155E-03  
I-131 1.1495E-03  
I-143 1.621E-03  
I-145 1.671E-03  
I-146 1.499E-03  
XE-143 0.877E-03  
XE-145 0.916E-04  
TOTAL NOBLE GAS  
TOTAL  $\mu\text{Ci}/\text{ML}$  = 0.0003  
RE-14 CPM = 0.05

8:15 15 min AVG

ELAPSED TIME - 15.0 MINUTES  
Release Rate -  $3.7900E-06$   
Stack flow - 78000 CFM  
ISOTOPE  $\mu\text{Ci}/\text{ML}$  in PVS  
KR-005 6.625E-05  
KR-05M 0.908E-03  
KR-07 9.304E-03  
KR-08 0.0003E-03  
I-131 2.243E-03  
I-143 0.379E-03  
I-145 0.702E-03  
I-146 0.779E-03  
XE-143 0.746E-03  
XE-145 0.638E-03  
TOTAL NOBLE GAS  
TOTAL  $\mu\text{Ci}/\text{ML}$  = 0.0003  
RE-14 CPM = 0.05

8:15 INSTANTANEOUS

ELAPSED TIME - 22.5 MINUTES  
Release Rate -  $4.7000E-06$   
Stack flow - 78000 CFM  
ISOTOPE  $\mu\text{Ci}/\text{ML}$  in PVS  
KR-005 3.293E-05  
KR-05M 0.336E-03  
KR-07 0.0003E-03  
KR-08 0.0003E-03  
I-131 2.814E-03  
I-143 0.472E-03  
I-145 0.871E-03  
I-146 0.912E-03  
XE-143 0.807E-03  
XE-145 0.721E-03  
TOTAL NOBLE GAS  
TOTAL  $\mu\text{Ci}/\text{ML}$  = 0.0002  
RE-14 CPM = 0.06

8:30 15 MIN AVG

ELAPSED TIME - 30.0 MINUTES  
Release Rate -  $5.4500E-06$   
Stack flow - 78000 CFM  
ISOTOPE  $\mu\text{Ci}/\text{ML}$  in PVS  
KR-005 0.774E-03  
KR-05M 1.504E-03  
KR-07 4.211E-03  
KR-08 0.0003E-03  
I-131 1.956E-03  
I-143 0.252E-03  
I-145 0.417E-03  
I-146 0.440E-03  
XE-143 0.366E-03  
XE-145 0.339E-03  
TOTAL NOBLE GAS  
TOTAL  $\mu\text{Ci}/\text{ML}$  = 0.0002  
RE-14 CPM = 0.06

8:30 INSTANTANEOUS

ELAPSED TIME - 37.5 MINUTES  
Release Rate -  $6.2200E-06$   
Stack flow - 78000 CFM  
ISOTOPE  $\mu\text{Ci}/\text{ML}$  in PVS  
KR-005 0.803E-03  
KR-05M 0.860E-03  
KR-07 0.0003E-03  
KR-08 0.0003E-03  
I-131 0.166E-03  
I-143 0.200E-03  
I-145 0.236E-03  
I-146 0.250E-03  
XE-143 0.200E-03  
XE-145 0.180E-03  
TOTAL NOBLE GAS  
TOTAL  $\mu\text{Ci}/\text{ML}$  = 0.0002  
RE-14 CPM = 0.06

8:45 15 MIN AVG

(2)

KR-00	4.4886E-06	17. FALIED POC
I-131	3.6775E-06	
I-14	1.0000E-06	
I-140	2.0332E-06	
I-1404	4.9569E-06	
I-1405	4.9569E-06	
I-1406	4.9569E-06	
I-1407	4.9569E-06	
TOTAL NOBLE GASES	3.024E-06	
TOTAL UC1/ML=	3.2134E-06	
RE-14 CPM=	3.5995E-06	

ELAPSED TIME - 45.0 MINUTES  
 Release Rate - 6.8500E-06  
 Stack flow - 78000 CFM  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS

KR-185	4.7445E-06	$\times 10^{-1}$
KR-186	4.8100E-06	
KR-187	4.6540E-06	
I-131	4.7951E-06	
I-132	4.0405E-06	
I-133	4.7104E-06	
I-134	4.9568E-06	
I-135	4.8310E-06	
XE-136	4.4089E-06	
XE-137	4.6999E-06	
TOTAL NOBLE GASES	3.6789E-06	
TOTAL UC1/ML=	3.5995E-06	
RE-14 CPM=	3.5995E-06	

ELAPSED TIME - 52.5 MINUTES  
 Release Rate - 7.4800E-06  
 Stack flow - 78000 CFM  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS

KR-185	5.1809E-06	
KR-186	4.9466E-06	
KR-187	4.7006E-06	
I-131	4.8740E-06	
I-132	4.4187E-06	
I-133	4.9069E-06	
I-134	4.3633E-06	
XE-135	4.5410E-06	
XE-136	4.4190E-06	
TOTAL NOBLE GASES	3.8610E-06	
TOTAL UC1/ML=	3.8707E-06	
RE-14 CPM=	3.9913E-06	

ELAPSED TIME - 60.0 MINUTES  
 Release Rate - 8.0100E-06  
 Stack flow - 78000 CFM  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS

KR-185	6.5400E-06	
KR-186	6.4380E-06	
KR-187	6.2069E-06	
I-131	6.2629E-06	
I-132	4.7296E-06	
I-133	6.1165E-06	
I-134	6.9464E-06	
I-135	7.2694E-06	
XE-136	6.6520E-06	
XE-137	6.0300E-06	
TOTAL NOBLE GASES	4.0614E-06	
TOTAL UC1/ML=	4.3147E-06	
RE-14 CPM=	4.3147E-06	

ELAPSED TIME - 67.5 MINUTES  
 Release Rate - 8.5300E-06  
 Stack flow - 78000 CFM  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS

KR-185	9.0041E-06	
KR-186	8.1640E-06	
KR-187	8.2924E-06	
I-131	8.3240E-06	
I-132	7.9850E-06	
I-133	8.0340E-06	
I-134	8.0340E-06	
I-135	8.0340E-06	
I-136	8.0340E-06	
I-137	8.0340E-06	
XE-138	8.0340E-06	
XE-139	8.0340E-06	
TOTAL NOBLE GASES	4.0614E-06	
TOTAL UC1/ML=	4.3147E-06	
RE-14 CPM=	4.3147E-06	

ELAPSED TIME - 75.0 MINUTES

8:45 15 MIN AVG

8:45 INSTANTANEOUS

9:00 15 MIN AVG

9:00 INSTANTANEOUS

9:15 15 MIN AVG

ELAPSED TIME - 75.0 MINUTES  
 Release Rate - 8.9600E-05  
 Stack flow - 78000 CFM  
 Isotope - uC<sub>1</sub>/m<sub>1</sub> in PVS  
 KKR-005 6. 2059E-05  
 KKR-005M 6. 1972E-05  
 KKR-007 6. 6410E-05  
 KKR-008 6. 4450E-05  
 1-1 4. 0100E-05 } X10<sup>-1</sup>  
 1-1 4. 0100E-05  
 1-1 4. 0100E-05  
 1-1 4. 0100E-05  
 XE-135 4. 0100E-05  
 XE-135M 4. 0100E-05  
 TOTAL NOBLE GAS 4. 0100E-05  
 TOTAL uC<sub>1</sub>/mL = 4. 0100E-05  
 RE-14 CPM = 4. 0100E-05

9:15 INSTANTANEOUS

ELAPSED TIME - 82.5 MINUTES  
 Release Rate - 9.3900E-05  
 Stack flow - 79000 CFM  
 Isotope - uC<sub>1</sub>/m<sub>1</sub> in PVS  
 KKR-005 6. 4214E-05  
 KKR-005M 6. 2997E-05  
 KKR-007 6. 2991E-05  
 KKR-008 6. 4669E-05  
 1-1 31 1. 0220E-04 } X10<sup>-1</sup>  
 1-1 31 1. 0220E-04  
 1-1 31 1. 0220E-04  
 1-1 31 1. 0220E-04  
 1-1 31 1. 0220E-04  
 XE-135 8. 6680E-05  
 XE-135M 8. 6680E-05  
 XE-135 1. 9218E-05  
 XE-135M 1. 3971E-05  
 TOTAL NOBLE GAS 3. 4358E-05  
 TOTAL uC<sub>1</sub>/mL = 3. 4358E-05  
 RE-14 CPM = 5. 0527E-06

9:30 15 MIN AVG

ELAPSED TIME - 90.0 MINUTES  
 Release Rate - 9.7300E-06  
 Stack flow - 79000 CFM  
 Isotope - uC<sub>1</sub>/m<sub>1</sub> in PVS  
 KKR-005 6. 0539E-06  
 KKR-005M 2. 2653E-06  
 KKR-007 4. 0597E-06  
 KKR-008 6. 5880E-06 } X10<sup>-1</sup>  
 1-1 31 1. 7435E-06  
 1-1 31 1. 0554E-06  
 1-1 31 8. 4000E-07  
 1-1 31 6. 0820E-07  
 1-1 31 4. 9944E-07  
 XE-135 4. 5930E-07  
 XE-135M 3. 6360E-07  
 TOTAL NOBLE GAS 3. 5263E-07  
 TOTAL uC<sub>1</sub>/mL = 3. 5263E-07  
 RE-14 CPM = 5. 2375E-06

9:30 INSTANTANEOUS

ELAPSED TIME - 97.5 MINUTES  
 Release Rate - 1.0100E-05  
 Stack flow - 79000 CFM  
 Isotope - uC<sub>1</sub>/m<sub>1</sub> in PVS  
 KKR-005 6. 0000E-05  
 KKR-005M 2. 0000E-05  
 KKR-007 4. 0000E-05  
 KKR-008 6. 0000E-05  
 1-1 31 1. 0000E-05 } X10<sup>-1</sup>  
 1-1 31 1. 0000E-05  
 1-1 31 1. 0000E-05  
 1-1 31 1. 0000E-05  
 1-1 31 1. 0000E-05  
 XE-135 2. 0000E-05  
 XE-135M 1. 0000E-05  
 XE-135 3. 0000E-05  
 XE-135M 1. 0000E-05  
 TOTAL NOBLE GAS 5. 0000E-05  
 TOTAL uC<sub>1</sub>/mL = 5. 0000E-05  
 RE-14 CPM = 5. 4455E-06

9:45 15 MIN AVG

ELAPSED TIME - 105.0 MINUTES  
 Release Rate - 1.0400E-05  
 Stack flow - 79000 CFM  
 Isotope - uC<sub>1</sub>/m<sub>1</sub> in PVS  
 KKR-005 7. 0000E-05  
 KKR-005M 2. 0000E-05  
 KKR-007 4. 0000E-05  
 KKR-008 6. 0000E-05  
 1-1 31 1. 0000E-05 } X10<sup>-1</sup>  
 1-1 31 1. 0000E-05  
 1-1 31 1. 0000E-05  
 1-1 31 1. 0000E-05  
 1-1 31 1. 0000E-05  
 XE-135 2. 0000E-05  
 XE-135M 1. 0000E-05  
 XE-135 3. 0000E-05  
 XE-135M 1. 0000E-05  
 TOTAL NOBLE GAS 5. 0000E-05  
 TOTAL uC<sub>1</sub>/mL = 5. 0000E-05  
 RE-14 CPM = 5. 4455E-06

945 INSTANTANEOUS

17- FAILEN FUEL (4)

ELASGED TIME - 412.5 MINUTES  
 RELEASED RATE - 1.0600E-05  
 ATTACK + 1000  
 ISOTOLPE  
 79000 CFM  
 0.01/m<sup>3</sup>  
 PVG  
 7.3489  
 1.9160  
 5.4746  
 16.0343  
 4.1400  
 1.1930  
 3.0030  
 8.4400  
 0.0040  
 } X10<sup>-1</sup>

TOTAL NOBLE GAS = 6.7080E-02  
TOTAL OCTANE = 6.7450E-02  
RE-14 CPM = 6.6859E-06

ELAPSED TIME - 120.0 MINUTES  
 Release Rate - 1.0900E-05  
 Attack flow - 79000 CFM  
 uCi/ml PVS  
 454000 in  
 345000 in  
 104000 in  
 311100 in  
 983100 in  
 169000 in  
 904300 in  
 432400 in  
 249200 in  
 118000 in  
 844700 in  
 844400 in  
 844400 in  
 } X10^-1

TOTAL NOBLE GAS  
TOTAL oC1/mL<sup>a</sup>  
EE = 1.0 EPM<sup>b</sup>

ELASPSED TIME - 127.5 MINUTES  
 Release Rate - 1.1100E-05  
 Stack flow - 79000 CFM  
 ISOTOPES uC<sub>1</sub>/M1 PVS  
 K-40 349.0000E-05  
 K-40 341.5000E-05  
 K-40 001.6500E-05  
 K-40 461.4000E-05  
 K-40 441.5000E-05  
 I-131 179.0000E-05  
 I-131 660.0000E-05  
 I-131 489.2000E-05  
 I-131 17.32E-05  
 Xe 4.43E-05  
 ORE 1.1100E-05

TOTAL ROBBERY DATA  
TOTAL 6041 CPRI  
T-14 CPRI

ELASPSED TIME - 135.0 MINUTES  
FILED 1200M 1-12-05 PVS  
 $\times 10^{-1}$

SEARCHED TIME + 142.6 MINUTES  
INDEXED INDEXED BY 1.1400 HRS  
SERIALIZED SERIALIZED BY 1.1400 HRS  
FILED FILED BY 1.1400 HRS

$\times 10^{-1}$  10:00

15 MIN AVG

$$\left\{ \begin{array}{l} x_{10^{-1}} \\ \end{array} \right. \quad 10:00$$

### INSTANTANEOUS

10:15

15 MIN AVG

$\times 10^{-1}$

10:15

## INSTANTANEOUS

Release Rate - 1.1400E-05  
 Stack flow - 79000 CFM  
 NO<sub>2</sub> - 7.7059E-05 PVS  
 KR-1000PE  
 KR-1000P  
 I-1-31  
 I-1-32  
 I-1-33  
 I-1-34  
 XE-13  
 XE-14  
 TOTAL NOBLE =  
 TOTAL NO<sub>2</sub>/ML =  
 RE-14 CFM =

7.7059E-05  
 6.2730E-05  
 6.6130E-05  
 4.4960E-05  
 6.6466E-05  
 7.710E-05  
 9.060E-05  
 0.0318E-06

$\times 10^{-4}$

10:30

15 MIN AVG

ELAPSED TIME - 150.0MINUTES  
 Release Rate - 1.1500E-05  
 Stack flow - 79000 CFM  
 NO<sub>2</sub> - 7.7059E-05 PVS  
 KR-1000PE  
 KR-1000P  
 I-1-31  
 I-1-32  
 I-1-33  
 I-1-34  
 XE-13  
 XE-14  
 TOTAL NOBLE =  
 TOTAL NO<sub>2</sub>/ML =  
 RE-14 CFM =

7.7059E-05  
 6.28665E-05  
 6.60930E-05  
 4.44660E-05  
 6.64660E-05  
 7.710E-05  
 9.060E-05  
 0.0481E-06

$\times 10^{-4}$

10:30

INSTANTANEOUS

## 5 107. MELTED FUEL

NOTE: DIVIDE ALL VALUES  
BY 2

ELAPSED TIME - 157.5 MINUTES  
 Release Rate =  $1.4200E-05$   
 Stack flow = 79000 CFM in PVS  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KR-05S 5.4719E-05  
 KR-05M 1.5056E-01  
 KR-07 1.0947E-01  
 KR-08 3.4704E-01  
 I-131 3.1621E-01  
 I-132 1.5547E-02  
 I-133 4.4719E-02 }  $\times 10^{-1}$   
 I-134 2.2927E-02  
 I-135 1.1420E-01  
 XE-133 7.144E-00  
 XE-135 4.9701E-01  
 TOTAL NOBLE GAS 0.0260E 00  
 TOTAL UC1/ML = 5.8579E 09  
 RE-14 CPM =

10:45 15 MIN AVG

ELAPSED TIME - 165.0 MINUTES  
 Release Rate =  $6.7600E-05$   
 Stack flow = 79000 CFM in PVS  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KR-05S 1.3068E-02  
 KR-05M 1.0876E-01  
 KR-07 9.8011E-01  
 KR-08 1.05516E-01  
 I-131 1.07344E-01  
 I-132 1.00000E-01 }  $\times 10^{-1}$   
 I-133 2.78821E-01  
 I-134 2.06689E-01  
 I-135 1.36944E-00  
 XE-133 1.36722E-00  
 XE-135 7.1631E-00  
 TOTAL NOBLE GAS 2.2630E 00  
 TOTAL UC1/ML = 3.2977E 10  
 RE-14 CPM =

10:45 INSTANTANEOUS

ELAPSED TIME - 172.5 MINUTES  
 Release Rate =  $1.0200E-04$   
 Stack flow = 79000 CFM in PVS  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KR-05 2.0926E-02  
 KR-05M 1.7344E-01  
 KR-07 1.6610E-01  
 KR-08 1.2511E-00  
 I-131 1.1270E-02 }  $\times 10^{-3}$   
 I-132 1.0971E-02  
 I-133 1.1644E-02  
 I-134 4.2703E-02 }  $\times 10^{-3}$   
 I-135 6.6115E-00  
 XE-133 1.9477E-00  
 XE-135 1.07221E-01  
 TOTAL NOBLE GAS 1.0722E 01  
 TOTAL UC1/ML = 7.2347E 10  
 RE-14 CPM =

11:00 15 MIN AVG

ELAPSED TIME - 180.0 MINUTES  
 Release Rate =  $1.2600E-04$   
 Stack flow = 79000 CFM in PVS  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KR-05 2.5853E-02  
 KR-05M 1.9453E-01  
 KR-07 4.2233E-01  
 KR-08 1.4980E-00  
 I-131 1.00000E-01 }  $\times 10^{-3}$   
 I-132 1.00000E-01  
 I-133 1.00000E-01  
 I-134 1.00000E-01  
 I-135 1.00000E-01  
 XE-133 1.00000E-01  
 XE-135 1.00000E-01  
 TOTAL NOBLE GAS 1.00000E 01  
 TOTAL UC1/ML = 1.00000E 11  
 RE-14 CPM =

IN STANTANEOUS

ELAPSED TIME - 187.5 MINUTES  
 Release Rate =  $1.4200E-04$   
 Stack flow = 79000 CFM in PVS  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KR-05 2.4000E-02  
 KR-05M 1.9433E-01  
 KR-07 4.4797E-01  
 KR-08 1.0000E-01 }  $\times 10^{-2}$

KR-808	1.46491E-00
I-131	1.60010E-00
I-131	2.46500E-02
I-131	7.70551E-00
I-131	8.30000E-02
XE-131	3.00000E-00
XE-131	7.00000E-02
NOBLE GAS	7.00000E-00
TOTAL UC1/ML	1.50000E-01
RE-14 CPM	1.3864E-11

 $\times 10^{-3}$ 

11:15 15 MIN AVG

NOTE: DIVIDE ALL  
VALUES BY 2

ELAPSED TIME - 125.0 MINUTES  
Release Rate - 1.5400E-04  
Stack flow - 79000 CFM

ISOTOPE uCi/m<sup>3</sup> in PVS

KR-85	3.1524E-02
KR-85M	3.1604E-01
KR-87	4.5025E-01
KR-88	1.7219E-00
I-131	4.7149E-03
I-131	6.6478E-03
I-131	8.1042E-03
I-134	6.2027E-02
XE-135	4.0066E-01
XE-135	3.0276E-00

 $\times 10^{-3}$ 

TOTAL NOBLE GAS  
TOTAL UC1/ML = 1.6339E-01  
RE-14 CPM = 1.5964E-11

ELAPSED TIME - 202.5 MINUTES  
Release Rate - 1.6200E-04

Stack flow - 79000 CFM  
ISOTOPE uCi/m<sup>3</sup> in PVS

KR-85	3.3235E-02
KR-85M	8.4166E-01
KR-87	4.4234E-01
KR-88	1.7564E-00
I-131	4.9576E-02
I-131	6.72440E-03
I-131	7.7244E-03
I-131	8.4414E-02
XE-135	4.0617E-01
XE-135	5.2043E-00

 $\times 10^{-3}$ 

11:30 15 MIN AVG

TOTAL NOBLE GAS  
TOTAL UC1/ML = 1.7139E-01  
RE-14 CPM = 1.7556E-11

ELAPSED TIME - 210.0 MINUTES  
Release Rate - 1.6700E-04

Stack flow - 79000 CFM  
ISOTOPE uCi/m<sup>3</sup> in PVS

KR-85	3.4261E-02
KR-85M	8.5069E-01
KR-87	4.25586E-01
KR-88	1.75586E-00
I-131	4.70556E-02
I-131	5.57296E-03
I-131	6.9776E-03
I-131	7.2149E-03
I-131	8.5551E-03
XE-135	4.0975E-01
XE-135	5.3400E-00

 $\times 10^{-3}$ 

11:30 INSTANTANEOUS

TOTAL NOBLE GAS  
TOTAL UC1/ML = 1.7621E-01  
RE-14 CPM = 1.8554E-11

ELAPSED TIME - 217.5 MINUTES  
Release Rate - 1.7000E-04

Stack flow - 79000 CFM  
ISOTOPE uCi/m<sup>3</sup> in PVS

KR-85	3.4875E-02
KR-85M	8.4900E-01
KR-87	4.0466E-01
KR-88	1.73366E-00
I-131	3.137366E-02
I-131	6.24112E-03
I-131	6.10120E-03
I-131	6.1005736E-03
I-131	6.100502E-03
XE-135	3.43000E-01
XE-135	3.75000E-01

 $\times 10^{-3}$ 

11:45 15 MIN AVG

TOTAL NOBLE GAS  
TOTAL UC1/ML = 1.91700E-01  
RE-14 CPM = 1.91700E-11

ELAPSED TIME - 225.0 MINUTES

ELAPSED TIME - 225.0 MINUTES  
Release Rate - 1.7100E-04  
Stack flow - 79000 CFM

ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS

KR-85 3.5081E-02

KR-85M 3.5266E-02

KR-87 3.5298E-01

KR-88 3.6483E-00

L-131 3.5243E-02

L-132 3.5604E-02

L-133 3.5132E-02

L-134 3.5275E-02

L-135 3.4952E-02

XE-133 3.1394E-01

XE-135 3.5219E-00

TOTAL NOBLE GASES 1.7703E-01

TOTAL  $\mu\text{Ci}/\text{ml}$  1.8020E-01

RE-14 CPM 1.9402E-11

ELAPSED TIME - 232.5 MINUTES

Release Rate - 1.7200E-04  
Stack flow - 79000 CFM

ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS

KR-85 3.5266E-02

KR-85M 3.5298E-01

KR-87 3.5275E-01

KR-88 3.6483E-00

L-131 3.5243E-02

L-132 3.5604E-02

L-133 3.5132E-02

L-134 3.5275E-02

L-135 3.4952E-02

XE-133 3.1394E-01

XE-135 3.5219E-00

TOTAL NOBLE GASES 1.7703E-01

TOTAL  $\mu\text{Ci}/\text{ml}$  1.8020E-01

RE-14 CPM 1.9402E-11

ELAPSED TIME - 240.0 MINUTES

Release Rate - 1.7100E-04  
Stack flow - 79000 CFM

ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS

KR-85 3.5081E-02

KR-85M 3.5266E-01

KR-87 3.5298E-00

KR-88 3.6483E-02

L-131 3.5243E-02

L-132 3.5604E-02

L-133 3.5132E-02

L-134 3.5275E-02

L-135 3.4952E-02

XE-133 3.1357E-01

XE-135 3.5263E-00

TOTAL NOBLE GASES 1.7644E-01

TOTAL  $\mu\text{Ci}/\text{ml}$  1.7078E-01

RE-14 CPM 1.9097E-11

ELAPSED TIME - 247.5 MINUTES

Release Rate - 1.7000E-04  
Stack flow - 79000 CFM

ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS

KR-85 3.4876E-02

KR-85M 3.8463E-01

KR-87 3.9798E-01

KR-88 4.5316E-00

L-131 4.1684E-02

L-132 4.9674E-02

L-133 4.8232E-02

L-134 4.8654E-02

XE-133 3.1362E-01

XE-135 3.5295E-00

TOTAL NOBLE GASES 1.7603E-01

TOTAL  $\mu\text{Ci}/\text{ml}$  1.8801E-01

RE-14 CPM 1.8801E-11

ELAPSED TIME - 255.0 MINUTES

Release Rate - 1.6900E-04  
Stack flow - 79000 CFM

ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS

KR-85 3.4674E-02

KR-85M 3.9034E-01

KR-87 3.4763E-00

KR-88 5.1556E-02

L-131 2.0766E-02

L-132 8.8629E-02

L-133 4.0399E-03

L-134 6.1398E-02

$\times 10^{-3}$  11:45

INSTANTANEOUS

NOTE: DIVIDE ALL  
VALUES BY 2

$\times 10^{-3}$  12:00

15 MIN AVG

12:00 INSTANTANEOUS

12:15

15 MIN AVG

12:15

INSTANTANEOUS

12:15 INSTANTANEOUS

TOTAL NOBLE GAS	
TOTAL UC1/ML=	
RE-14 CPM=	

ELAPSED TIME - 262.5 MINUTES  
 Release Rate - 1.6700E-04  
 Stack flow - 79000 CFM  
 ISOTOPES UC1/M1 in PVS  
 KRR-855M 3.4260E-02  
 KRR-857M 3.4096E-01  
 KRR-859M 3.6300E-01  
 KRR-868M 3.4145E-00  
 I-1131 3.8923E-02 } x10<sup>-3</sup>  
 I-1132 3.7200E-02  
 I-1133 3.6171E-02  
 I-1134 3.9894E-02 } x10<sup>-3</sup>  
 I-1135 3.1177E-01  
 XE-1133 3.5111E-00  
 XE-1135 3.7143E-01  
 TOTAL NOBLE GAS 1.7363E-01  
 TOTAL UC1/ML= 1.7363E-01  
 RE-14 CPM= 1.8016E-11

NOTE : DIVIDE ALL  
VALUES BY 2

12:30 15 MIN AVG

ELAPSED TIME - 270.0 MINUTES  
 Release Rate - 1.6500E-04  
 Stack flow - 79000 CFM  
 ISOTOPES UC1/M1 in PVS  
 KRR-855M 3.3850E-02  
 KRR-857M 3.1779E-01  
 KRR-859M 3.4349E-01 } x10<sup>-3</sup>  
 KRR-868M 3.3056E-00  
 I-1131 3.0099E-01  
 I-1132 3.0660E-02 } x10<sup>-3</sup>  
 I-1133 3.0560E-02  
 I-1134 3.0044E-02 } x10<sup>-3</sup>  
 I-1135 3.1071E-01  
 XE-1133 3.4894E-00  
 XE-1135 3.1091E-01  
 TOTAL NOBLE GAS 1.7112E-01  
 TOTAL UC1/ML= 1.7112E-01  
 RE-14 CPM= 1.7532E-11

12:30 INSTANTANEOUS

ELAPSED TIME - 277.5 MINUTES  
 Release Rate - 1.6300E-04  
 Stack flow - 79000 CFM  
 ISOTOPES UC1/M1 in PVS  
 KRR-855M 3.3444E-02  
 KRR-857M 6.9524E-01 } x10<sup>-3</sup>  
 KRR-859M 6.2446E-01  
 KRR-868M 1.0996E-00  
 I-1131 1.7000E-01  
 I-1132 1.7000E-01 } x10<sup>-3</sup>  
 I-1133 1.4431E-01  
 I-1134 1.0000E-01 } x10<sup>-3</sup>  
 I-1135 1.6921E-01 } x10<sup>-3</sup>  
 XE-1133 1.0964E-01  
 XE-1135 3.4664E-00 } x10<sup>-3</sup>  
 TOTAL NOBLE GAS 1.59674E-01  
 TOTAL UC1/ML= 1.59674E-01  
 RE-14 CPM= 1.7060E-11

15 MIN AVG

12:45

ELAPSED TIME - 285.0 MINUTES  
 Release Rate - 1.6100E-04  
 Stack flow - 79000 CFM  
 ISOTOPES UC1/M1 in PVS  
 KRR-855M 3.3024E-02  
 KRR-857M 3.1314E-01 } x10<sup>-3</sup>  
 KRR-859M 3.1314E-01  
 KRR-868M 3.1314E-01 } x10<sup>-3</sup>  
 I-1131 3.0000E-01  
 I-1132 3.0000E-01 } x10<sup>-3</sup>  
 I-1133 3.0000E-01 } x10<sup>-3</sup>  
 I-1134 3.0000E-01 } x10<sup>-3</sup>  
 I-1135 3.0000E-01 } x10<sup>-3</sup>  
 XE-1133 3.0000E-01 } x10<sup>-3</sup>  
 XE-1135 3.0000E-01 } x10<sup>-3</sup>

12:45 INSTANTANEOUS

ELAPSED TIME - 292.5 MINUTES  
 Release Rate - 1.5900E-04  
 Stack flow - 79000 CFM  
 ISOTOPES UC1/M1 in PVS

13:00 15 MIN AVG

KR-87	1.9112E-01
KR-88	1.1904E-00
I-131	4.6397E-00
I-132	4.6397E-00
I-133	4.6397E-00
I-134	4.6397E-00
XE-131	1.0244E-01
XE-132	1.4164E-00
XE-133	1.6031E-01
TOTAL NOBLE GAS	1.0434E-01
RE-14 CPM=	1.6147E-11

 $\times 10^{-3}$ 

13:00

15 MIN AVG

NOTE: DIVIDE ALL  
VALUES BY 2

ELAPSED TIME - 300.0 MINUTES  
 Release Rate - 1.5700E-04  
 Stack flow - 79000 CFM  
 ISOTOPE      uCi/mL in PVS

KR-85	3.3116E-01
KR-86M	1.7962E-01
KR-87	1.7962E-01
KR-88	1.7962E-01
I-131	4.0639E-02
I-132	4.0639E-02
I-133	4.0639E-02
I-134	4.0639E-02
I-135	4.0639E-02
XE-133	3.8956E-00
XE-135	6.0008E-01
TOTAL NOBLE GAS	1.6206E-01
TOTAL UCI/ML=	1.5707E-11
RE-14 CPM=	1.5707E-11

 $\times 10^{-3}$ 

13:00

INSTANTANEOUS

ELAPSED TIME - 307.5 MINUTES  
 Release Rate - 1.5500E-04  
 Stack flow - 79000 CFM  
 ISOTOPE      uCi/mL in PVS

KR-85	3.1479E-02
KR-86M	6.1095E-01
KR-87	1.6250E-01
KR-88	1.0910E-00
I-131	1.1423E-00
I-132	1.4053E-00
I-133	1.0897E-00
I-134	1.0557E-00
I-135	1.4140E-00
XE-133	1.0510E-01
XE-135	3.3616E-00
TOTAL NOBLE GAS	1.5787E-01
TOTAL UCI/ML=	1.5276E-01
RE-14 CPM=	1.5276E-11

 $\times 10^{-3}$ 

13:15

15 MIN AVG

ELAPSED TIME - 315.0 MINUTES  
 Release Rate - 1.5200E-04  
 Stack flow - 79000 CFM  
 ISOTOPE      uCi/mL in PVS

KR-85	3.1183E-02
KR-86M	1.8742E-01
KR-87	1.4802E-01
KR-88	1.0374E-00
I-131	4.6204E-02
I-132	3.8046E-02
I-133	1.7120E-02
I-134	1.0905E-02
I-135	1.0905E-02
XE-133	1.0446E-01
XE-135	1.9654E-01
TOTAL NOBLE GAS	1.4663E-01
TOTAL UCI/ML=	1.4663E-11
RE-14 CPM=	1.4663E-11

 $\times 10^{-3}$ 

13:15

INSTANTANEOUS

ELAPSED TIME - 322.5 MINUTES  
 Release Rate - 1.5000E-04  
 Stack flow - 79000 CFM  
 ISOTOPE      uCi/mL in PVS

KR-85	1.9725E-02
KR-86M	6.9719E-01
KR-87	6.9719E-01
KR-88	6.9719E-01
I-131	1.0140E-00
I-132	1.0140E-00
I-133	1.0140E-00
I-134	1.0140E-00
I-135	1.0140E-00
XE-133	1.0140E-00
XE-135	1.0140E-00
TOTAL NOBLE GAS	1.0140E-00
TOTAL UCI/ML=	1.0140E-11
RE-14 CPM=	1.0140E-11

 $\times 10^{-3}$ 

13:30

15 MIN AVG

TOTAL VOLUME = 1.5400E 01  
 RE-14 CPM = 1.4253E 11

ELAPSED TIME = 330.0 MINUTES  
 Release Rate = 1.4800E-04  
 Stack flow = 79000 CFM  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KKR-185M 3.0362E-02  
 KKR-186M 5.4984E-01  
 KKR-187 1.2639E-01  
 KKR-188 4.4962E-01  
 I-1-181 4.4947E-03  
 I-1-182 1.2476E-02  
 I-1-183 2.4799E-02  
 I-1-184 4.3194E-03  
 I-1-185 4.7206E-02  
 XE-1 1.0126E 01  
 XE-1 1.0490E 00  
 TOTAL NOBLE GAS 1.00031E 01  
 TOTAL UC1/ML = 1.00013E 01  
 RE-14 CPM = 1.3852E 11

13:30 INSTANTANEOUS

NOTE: DIVIDE ALL  
VALUES BY 2.

ELAPSED TIME = 337.5 MINUTES  
 Release Rate = 1.4600E-04  
 Stack flow = 79000 CFM  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KKR-185M 3.9952E-02  
 KKR-186M 5.3101E-01  
 KKR-187 1.1644E-01  
 KKR-188 9.0833E-01  
 I-1-181 4.4320E-02  
 I-1-182 1.1607E-03  
 I-1-183 2.3170E-03  
 I-1-184 1.1793E-03  
 I-1-185 4.6020E-02  
 XE-1 1.0012E 01  
 XE-1 3.2169E 00  
 TOTAL NOBLE GAS 1.4816E 01  
 TOTAL UC1/ML = 1.7777E 01  
 RE-14 CPM = 1.3460E 11

15 MIN AVG

ELAPSED TIME = 345.0 MINUTES  
 Release Rate = 1.4400E-04  
 Stack flow = 79000 CFM  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KKR-185 3.9542E-02  
 KKR-186M 5.1432E-01  
 KKR-187 1.0725E-01  
 KKR-188 8.6866E-01  
 I-1-181 4.3699E-02  
 I-1-182 1.1039E-02  
 I-1-183 2.1037E-02  
 I-1-184 1.0539E-03  
 I-1-185 4.4816E-02  
 XE-1 3.0990E 00  
 XE-1 3.1837E 00  
 TOTAL NOBLE GAS 1.4601E 01  
 TOTAL UC1/ML = 1.4774E 01  
 RE-14 CPM = 1.3075E 11

13:45 INSTANTANEOUS

ELAPSED TIME = 352.5 MINUTES  
 Release Rate = 1.4100E-04  
 Stack flow = 79000 CFM  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KKR-185 3.8892E-02  
 KKR-186M 4.9852E-01  
 KKR-187 9.0002E-01  
 KKR-188 6.37472E-01  
 I-1-181 4.3764E-02  
 I-1-182 1.0000E-02  
 I-1-183 2.0000E-02  
 I-1-184 4.0000E-02  
 I-1-185 8.0000E-02  
 XE-1 1.0000E 00  
 XE-1 1.0000E 00  
 TOTAL NOBLE GAS 1.4100E 01  
 TOTAL UC1/ML = 1.4100E 01  
 RE-14 CPM = 1.3100E 11

15 MIN AVG

ELAPSED TIME = 360.0 MINUTES  
 Release Rate = 1.4000E-04  
 Stack flow = 79000 CFM  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KKR-185 3.8790E-02  
 KKR-186M 4.9700E-01  
 KKR-187 8.9900E-01  
 KKR-188 6.3600E-01  
 I-1-181 4.3684E-02  
 I-1-182 1.0000E-02  
 I-1-183 2.0000E-02  
 I-1-184 4.0000E-02  
 I-1-185 8.0000E-02  
 XE-1 1.0000E 00  
 XE-1 1.0000E 00

14:00 INSTANTANEOUS

14:00 INSTANTANEOUS

I-134	0.4117E-04
I-135	0.2462E-02
XE-133	0.6673E-00
XE-135	0.1145E-00
TOTAL NOBLE GASES	0.4176E-01
TOTAL UC1/ML#	1.4341E-01
RE-14 CPM#	1.2329E-11

ELAPSED TIME - 367.5 MINUTES  
Release Rate - 1.3700E-04

Stack flow - 79000 CFM  
ISOTOPE uCi/m<sup>3</sup> in PVS

KR-130TOPE 2.8106E-02

KR-130GAS 3.6110E-01

KR-130M 8.3116E-02

KR-130V 7.5337E-01

KR-131 4.1514E-03

KR-132 6.7536E-02

KR-133 7.4503E-04

KR-134 4.1020E-03

KR-135 9.4816E-00

XEM-130TOPE 3.0583E-09

XEM-130GAS 4.3864E-01

XEM-130M 1.4024E-01

XEM-130V 1.1797E-11

TOTAL NOBLE GAS

TOTAL UC1/ML#

RE-14 CPM#

ELAPSED TIME - 375.0 MINUTES  
Release Rate - 1.3500E-04

Stack flow - 79000 CFM  
ISOTOPE uCi/m<sup>3</sup> in PVS

KR-130TOPE 2.7699E-02

KR-130GAS 4.4555E-01

KR-130M 7.6499E-02

KR-130V 7.1984E-01

KR-131 4.0889E-01

KR-132 9.0721E-02

KR-133 6.6276E-02

KR-134 6.6599E-04

KR-135 6.9900E-02

XEM-130TOPE 3.6446E-00

XEM-130GAS 0.0196E-00

XEM-130M 0.0144E-01

XEM-130V 1.1444E-11

TOTAL NOBLE GAS

TOTAL UC1/ML#

RE-14 CPM#

ELAPSED TIME - 382.5 MINUTES  
Release Rate - 1.3300E-04

Stack flow - 79000 CFM  
ISOTOPE uCi/m<sup>3</sup> in PVS

KR-130TOPE 2.7285E-02

KR-130GAS 4.0703E-02

KR-130M 7.0576E-02

KR-130V 6.8760E-01

KR-131 4.0255E-02

KR-132 6.6119E-02

KR-133 6.9406E-04

KR-134 6.8000E-02

KR-135 6.8446E-02

XEM-130TOPE 1.9000E-00

XEM-130GAS 1.3444E-00

XEM-130M 1.3597E-01

XEM-130V 1.1100E-11

TOTAL NOBLE GAS

TOTAL UC1/ML#

RE-14 CPM#

ELAPSED TIME - 390.0 MINUTES  
Release Rate - 1.3100E-04

Stack flow - 79000 CFM  
ISOTOPE uCi/m<sup>3</sup> in PVS

KR-130TOPE 2.7004E-02

KR-130GAS 4.0044E-02

KR-130M 7.0044E-02

KR-130V 6.9044E-01

KR-131 4.0044E-02

KR-132 6.6044E-02

KR-133 6.9444E-04

KR-134 6.8044E-02

KR-135 6.8444E-02

XEM-130TOPE 1.9044E-00

XEM-130GAS 1.3444E-00

XEM-130M 1.3597E-01

XEM-130V 1.1100E-11

TOTAL NOBLE GAS

TOTAL UC1/ML#

RE-14 CPM#

ELAPSED TIME - 397.5 MINUTES  
Release Rate - 1.2900E-04

Stack flow - 79000 CFM  
ISOTOPE uCi/m<sup>3</sup> in PVS

KR-130TOPE 2.6808E-02

KR-130GAS 4.0088E-02

KR-130M 7.0088E-02

KR-130V 6.9088E-01

KR-131 4.0088E-02

KR-132 6.6088E-02

KR-133 6.9488E-04

KR-134 6.8088E-02

KR-135 6.8488E-02

XEM-130TOPE 1.9088E-00

XEM-130GAS 1.3444E-00

XEM-130M 1.3597E-01

XEM-130V 1.1100E-11

TOTAL NOBLE GAS

TOTAL UC1/ML#

RE-14 CPM#

NOTE: DIVIDE ALL  
VALUES BY 2

14:15 15 MIN AVG

14:15 INSTANTANEOUS

14:30 15 MIN AVG

14:30 INSTANTANEOUS

14:45 15 MIN AVG

TOTAL NOBLE  
 TOTAL UCl/ML =  
 RE-14 CPM =  $\frac{1}{1.04300 \times 10^{-3}}$

ELAPSED TIME - 405.0 MINUTES  
Release Rate -  $79000 \text{ CFM} \cdot 1.2600E-04$

ISOTOPe  
flow =  $0C1/31 \text{ in PVS}$   
 $\times 10^{-3}$

TOTAL NOBLE  
 TOTAL UCl/ML =  
 RE-14 CPM =  $\frac{1}{1.02610 \times 10^{-3}}$

ELAPSED TIME - 412.5 MINUTES  
Release Rate -  $79000 \text{ CFM} \cdot 1.2600E-04$

ISOTOPe  
flow =  $0C1/31 \text{ in PVS}$   
 $\times 10^{-3}$

TOTAL NOBLE  
 TOTAL UCl/ML =  
 RE-14 CPM =  $\frac{1}{930940 \times 10^{-3}}$

ELAPSED TIME - 420.0 MINUTES  
Release Rate -  $79000 \text{ CFM} \cdot 1.2400E-04$

ISOTOPe  
flow =  $0C1/31 \text{ in PVS}$   
 $\times 10^{-3}$

TOTAL NOBLE  
 TOTAL UCl/ML =  
 RE-14 CPM =  $\frac{1}{9232E-10}$

ELAPSED TIME - 427.5 MINUTES  
Release Rate -  $79000 \text{ CFM} \cdot 1.2500E-04$

ISOTOPe  
flow =  $0C1/31 \text{ in PVS}$   
 $\times 10^{-3}$

14:45

15 MIN AVG

NOTE: DIVIDE ALL  
VALUES BY 2

14:45 INSTANTANEOUS

15:00

15 MIN AVG

15:00 INSTANTANEOUS

15:15

15 MIN AVG

15 MIN AVG 14

15:15

$\int \text{yr}^{-3}$

TOTAL NOBLE  
TOTAL UCL / CPF  
RE-14

ELAPSED TIME = 435.0 MINUTES

1.2000E-04

Rate 79000 CFM

PVS

TOTAL NOBLE  
TOTAL UCL / CPF  
RE-14

# INSTANTANEOUS RCS CONCENTRATIONS

12 FAILED FUEL - MULTIPLY all values by  $10^{-2}$

FAILED FUEL  
 ELAPSED TIME - 15.0 MINUTES  
 RCS Conc. 7.8100E-01 ←  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KR-85 4.4257E 01  
 KR-85M 1.8353E 03  
 KR-87 3.2545E 03  
 KR-88 5.0582E 03  
 I-131 3.7830E-07  
 I-132 5.0165E-07  
 I-133 7.3155E-07  
 I-134 6.8629E-07  
 I-135 6.7091E-07  
 XE-133 1.3059E 04  
 XE-135 2.7615E 03  
 TOTAL NOBLE GAS 2.6013E 04  
 TOTAL  $\mu\text{Ci}/\text{ml}$ = 2.9437E 04  
 RE-14 CPM= 7.6772E 18

8:15

ELAPSED TIME - 30.0 MINUTES  
 RCS Conc. 6.7900E-01  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KR-85 3.8477E 01  
 KR-85M 1.5338E 03  
 KR-87 2.4678E 03  
 KR-88 4.1344E 03  
 I-131 3.2860E-07  
 I-132 4.0447E-07  
 I-133 6.3078E-07  
 I-134 4.8984E-07  
 I-135 5.6844E-07  
 XE-133 1.1391E 04  
 XE-135 2.4591E 03  
 TOTAL NOBLE GAS 2.2024E 04  
 TOTAL  $\mu\text{Ci}/\text{ml}$ = 2.2024E 04  
 RE-14 CPM= 3.4898E 18

8:30

ELAPSED TIME - 45.0 MINUTES  
 RCS Conc. 5.9000E-01  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KR-85 3.3433E 01  
 KR-85M 1.2812E 03  
 KR-87 1.8703E 03  
 KR-88 3.3775E 03  
 I-131 2.8527E-07  
 I-132 3.2594E-07  
 I-133 5.4360E-07  
 I-134 3.4943E-07  
 I-135 4.8136E-07  
 XE-133 9.9290E 03  
 XE-135 2.1842E 03  
 TOTAL NOBLE GAS 1.8676E 04  
 TOTAL  $\mu\text{Ci}/\text{ml}$ = 1.8676E 04  
 RE-14 CPM= 2.2375E 18

8:45

ELAPSED TIME - 60.0 MINUTES  
 RCS Conc. 5.1300E-01  
 ISOTOPE  $\mu\text{Ci}/\text{ml}$  in PVS  
 KR-85 2.9070E 01  
 KR-85M 1.0709E 03  
 KR-87 1.4184E 03  
 KR-88 2.7610E 03  
 I-131 2.4782E-05  
 I-132 2.6283E-05  
 I-133 4.6877E-05  
 I-134 2.4943E-05  
 I-135 4.0788E-05  
 XE-133 8.6602E 03  
 XE-135 1.9376E 03  
 TOTAL NOBLE GAS 1.5877E 04  
 TOTAL  $\mu\text{Ci}/\text{ml}$ = 1.5877E 04  
 RE-14 CPM= 1.4484E 18

9:00

(2)

RCS

17. FAILED FUEL - MULTIPLY ALL VALUES BY  $10^{-2}$

ELAPSED TIME - 75.0 MINUTES  
RCS Conc. 4.4500E-01  
ISOTOPE  $\mu\text{Ci}/\text{mL}$  in PVS  
KR-85 2.5216E 01  
KR-85M 8.9303E 02  
KR-87 1.0731E 03  
KR-88 3.2517E 03  
I-131 2.1478E-03  
I-132 2.1144E-03  
I-133 4.0329E-03  
I-134 1.7763E-01  
I-135 3.4481E-01  
XE-133 7.5354E 03  
XE-135 1.7119E 03  
TOTAL NOBLE GAS 1.3490E 04  
TOTAL  $\mu\text{Ci}/\text{mL}$ = 1.3491E 04  
RE-14 CPM= 9.3876E 17

9:15

ELAPSED TIME - 90.0 MINUTES  
RCS Conc. 3.8700E-01  
ISOTOPE  $\mu\text{Ci}/\text{mL}$  in PVS  
KR-85 2.1930E 01  
KR-85M 7.4659E 02  
KR-87 8.1396E 02  
KR-88 1.8410E 03  
I-131 1.8662E 01  
I-132 1.7053E 01  
I-133 3.4784E 01  
I-134 1.2682E 01  
I-135 2.9223E 01  
XE-133 6.5731E 03  
XE-135 1.5140E 03  
TOTAL NOBLE GAS 1.1511E 04  
TOTAL  $\mu\text{Ci}/\text{mL}$ = 1.1623E 04  
RE-14 CPM= 6.3273E 17

9:30

ELAPSED TIME - 105.0 MINUTES  
RCS Conc. 3.3600E-01  
ISOTOPE  $\mu\text{Ci}/\text{mL}$  in PVS  
KR-85 1.9040E 01  
KR-85M 6.2312E 02  
KR-87 6.1637E 02  
KR-88 1.5027E 03  
I-131 1.6188E 01  
I-132 1.3731E 01  
I-133 2.9952E 01  
I-134 9.0395E 00  
I-135 2.4726E 01  
XE-133 5.7239E 03  
XE-135 1.3348E 03  
TOTAL NOBLE GAS 9.8200E 03  
TOTAL  $\mu\text{Ci}/\text{mL}$ = 9.9136E 03  
RE-14 CPM= 4.1628E 17

9:45

ELAPSED TIME - 120.0 MINUTES  
RCS Conc. 2.9200E-01  
ISOTOPE  $\mu\text{Ci}/\text{mL}$  in PVS  
KR-85 1.6546E 01  
KR-85M 5.2057E 02  
KR-87 4.6720E 02  
KR-88 1.2278E 03  
I-131 1.4055E 01  
I-132 1.1066E 01  
I-133 2.5816E 01  
I-134 6.4493E 00  
I-135 2.0941E 01  
XE-133 4.9889E 03  
XE-135 1.1763E 03  
TOTAL NOBLE GAS 8.3973E 03  
TOTAL  $\mu\text{Ci}/\text{mL}$ = 8.4757E 03  
RE-14 CPM= 2.7627E 17

10:00

(3)

RCS

17. FAILED FUEL - MULTIPLY ALL VALUES BY  $10^{-2}$ 

ELAPSED TIME - 135.0 MINUTES  
 RCS Conc. 2.5400E-01  
 ISOTOPE uCi/mL in PVS  
 KR-85 1.4393E 01  
 KR-85M 4.3531E 02  
 KR-87 3.5445E 02  
 KR-88 1.0041E 03  
 I-131 1.2215E 01  
 I-132 8.9274E 00  
 I-133 2.2272E 01  
 I-134 4.6056E 00  
 I-135 1.7752E 01  
 XE-133 4.3522E 03  
 XE-135 1.0363E 03  
 TOTAL NOBLE GAS 7.1968E 03  
 TOTAL uCi/ML= 7.2625E 03  
 RE-14 CPM= 1.8487E 17

10:15

ELAPSED TIME - 150.0 MINUTES  
 RCS Conc. 2.2100E-01  
 ISOTOPE uCi/mL in PVS  
 KR-85 1.2523E 01  
 KR-85M 3.6410E 02  
 KR-87 2.6899E 02  
 KR-88 8.2135E 02  
 I-131 1.0619E 01  
 I-132 7.2036E 00  
 I-133 1.9219E 01  
 I-134 3.2898E 00  
 I-135 1.5053E 01  
 XE-133 3.7975E 03  
 XE-135 9.1217E 02  
 TOTAL NOBLE GAS 6.1766E 03  
 TOTAL uCi/ML= 6.2320E 03  
 RE-14 CPM= 1.2446E 17

10:30

(4)

## RCS

MELTED FUEL  
 ELAPSED TIME - 165.0 MINUTES  
 RCS Conc. 6.5900E-01  
 ISOTOPE  $\mu\text{Ci}/\text{mL}$  in PVS  
 KR-85 1.1203E 03  
 KR-85M 3.1311E 04  
 KR-87 2.0987E 04  
 KR-88 6.9079E 04  
 I-131 1.6748E 03  
 I-132 1.0546E 03  
 I-133 3.0091E 03  
 I-134 4.2636E 02  
 I-135 2.3158E 03  
 XE-133 3.5295E 05  
 XE-135 1.0317E 05  
 TOTAL NOBLE GAS 5.7862E 05  
 TOTAL  $\mu\text{Ci}/\text{mL}$  = 5.8710E 05  
 RE-14 CPM= 4.2643E 22

~~X10~~ 5% MELTED FUEL - MULTIPLY ALL VALUES BY .05

10:45

ELAPSED TIME - 180.0 MINUTES  
 RCS Conc. 3.5300E-01  
 ISOTOPE  $\mu\text{Ci}/\text{mL}$  in PVS  
 KR-85 6.0009E 02  
 KR-85M 1.6123E 04  
 KR-87 9.8052E 03  
 KR-88 3.4788E 04  
 I-131 8.9633E 02  
 I-132 5.2392E 02  
 I-133 1.5986E 03  
 I-134 1.8750E 02  
 I-135 1.2089E 03  
 XE-133 1.9013E 05  
 XE-135 5.6423E 04  
 TOTAL NOBLE GAS 3.0787E 05  
 TOTAL  $\mu\text{Ci}/\text{mL}$  = 3.1228E 05  
 RE-14 CPM= 6.4245E 21

11:00

ELAPSED TIME - 195.0 MINUTES  
 RCS Conc. 1.8900E-01  
 ISOTOPE  $\mu\text{Ci}/\text{mL}$  in PVS  
 KR-85 3.2129E 02  
 KR-85M 8.2986E 03  
 KR-87 4.5788E 03  
 KR-88 1.7511E 04  
 I-131 4.7948E 02  
 I-132 2.4015E 02  
 I-133 8.188E 02  
 I-134 8.2415E 01  
 I-135 6.3078E 02  
 XE-133 1.0236E 05  
 XE-135 3.0790E 04  
 TOTAL NOBLE GAS 1.6386E 05  
 TOTAL  $\mu\text{Ci}/\text{mL}$  = 1.6616E 05  
 RE-14 CPM= 1.0080E 21

11:15

ELAPSED TIME - 210.0 MINUTES  
 RCS Conc. 1.0100E-01  
 ISOTOPE  $\mu\text{Ci}/\text{mL}$  in PVS  
 KR-85 1.7170E 02  
 KR-85M 4.2632E 03  
 KR-87 2.1342E 03  
 KR-88 8.7978E 03  
 I-131 2.5600E 02  
 I-132 1.2893E 02  
 I-133 4.4990E 02  
 I-134 3.6157E 01  
 I-135 3.2850E 02  
 XE-133 5.4999E 04  
 XE-135 1.6742E 04  
 TOTAL NOBLE GAS 8.7108E 04  
 TOTAL  $\mu\text{Ci}/\text{mL}$  = 8.8307E 04  
 RE-14 CPM= 1.6397E 20

11:30

## RCS

57 MELTED FUEL - MULTIPLY ALL VALUES BY .05

ELAPSED TIME - 225.0 MINUTES  
 RCS Conc. 5.4000E-02  
 ISOTOPE uCi/mL in PVS  
 KR-85 9.1797E 01  
 KR-85M 2.1911E 03  
 KR-87 9.9520E 02  
 KR-88 4.4223E 03  
 I-131 1.3675E 02  
 I-132 6.3927E 01  
 I-133 2.3857E 02  
 I-134 1.5870E 01  
 I-135 1.7117E 02  
 XE-133 2.9563E 04  
 XE-135 9.0946E 03  
 TOTAL NOBLE GAS 4.6358E 04  
 TOTAL uCi/ML= 4.6984E 04  
 RE-14 CPM= 2.7842E 19

11:45

ELAPSED TIME - 240.0 MINUTES  
 RCS Conc. 2.8900E-02  
 ISOTOPE uCi/mL in PVS  
 KR-85 4.9128E 01  
 KR-85M 1.1273E 03  
 KR-87 4.6454E 02  
 KR-88 2.2251E 03  
 I-131 7.3120E 01  
 I-132 3.1729E 01  
 I-133 1.2663E 02  
 I-134 6.9729E 00  
 I-135 8.9273E 01  
 XE-133 1.5905E 04  
 XE-135 4.9383E 03  
 TOTAL NOBLE GAS 2.4709E 04  
 TOTAL uCi/ML= 2.5037E 04  
 RE-14 CPM= 4.9393E 12

12:00

ELAPSED TIME - 255.0 MINUTES  
 RCS Conc. 1.5500E-02  
 ISOTOPE uCi/mL in PVS  
 KR-85 2.6349E 01  
 KR-85M 5.8121E 02  
 KR-87 2.1730E 02  
 KR-88 1.1220E 03  
 I-131 3.9181E 01  
 I-132 1.5782E 01  
 I-133 6.7356E 01  
 I-134 3.0702E 00  
 I-135 4.6661E 01  
 XE-133 8.5743E 03  
 XE-135 2.6838E 03  
 TOTAL NOBLE GAS 1.3205E 04  
 TOTAL uCi/ML= 1.3377E 04  
 RE-14 CPM= 9.1786E 17

12:15

ELAPSED TIME - 270.0 MINUTES  
 RCS Conc. 8.3000E-03  
 ISOTOPE uCi/mL in PVS  
 KR-85 1.4109E 01  
 KR-85M 2.9919E 02  
 KR-87 1.0149E 02  
 KR-88 5.6484E 02  
 I-131 2.0962E 01  
 I-132 7.8374E 00  
 I-133 3.5772E 01  
 I-134 1.3497E 00  
 I-135 2.4350E 01  
 XE-133 4.6147E 03  
 XE-135 1.4545E 03  
 TOTAL NOBLE GAS 7.0488E 03  
 TOTAL uCi/ML= 7.1391E 03  
 RE-14 CPM= 1.7684E 17

12:30

## RCS

(6)

57. MELTED FUEL - MULTIPLY ALL VALUES BY .05

ELAPSED TIME - 285.0 MINUTES  
 RCS Conc. 4.1600E-03  
 ISOTOPE uCi/ml in PVS  
 KR-85 7.071E 00  
 KR-85M 1.4415E 02  
 KR-87 4.4366E 01  
 KR-88 2.6615E 02  
 I-131 1.0497E 01  
 I-132 3.6430E 00  
 I-133 1.7782E 01  
 I-134 5.5537E-01  
 I-135 1.1894E 01  
 XE-133 2.3245E 03  
 XE-135 7.3695E 02  
 TOTAL NOBLE GAS 3.5232E 03  
 TOTAL uCi/ML= 3.5676E 03  
 RE-14 CPM= 3.0009E 16

12:45

ELAPSED TIME - 300.0 MINUTES  
 RCS Conc. 2.4000E-03  
 ISOTOPE uCi/ml in PVS  
 KR-85 4.098E 00  
 KR-85M 7.9948E 01  
 KR-87 2.2325E 01  
 KR-88 1.4436E 02  
 I-131 6.0505E 00  
 I-132 1.9491E 00  
 I-133 1.0174E 01  
 I-134 2.6304E-01  
 I-135 6.6871E 00  
 XE-133 1.3476E 03  
 XE-135 4.2935E 02  
 TOTAL NOBLE GAS 2.0277E 03  
 TOTAL uCi/ML= 2.0528E 03  
 RE-14 CPM= 7.5584E 15

13:00

ELAPSED TIME - 315.0 MINUTES  
 RCS Conc. 1.3000E-03  
 ISOTOPE uCi/ml in PVS  
 KR-85 2.2099E 00  
 KR-85M 4.1630E 01  
 KR-87 1.0547E 01  
 KR-88 7.3517E 01  
 I-131 3.2744E 00  
 I-132 9.7913E-01  
 I-133 5.4658E 00  
 I-134 1.1697E-01  
 I-135 3.5300E 00  
 XE-133 7.3350E 02  
 XE-135 2.3463E 02  
 TOTAL NOBLE GAS 1.0960E 03  
 TOTAL uCi/ML= 1.1094E 03  
 RE-14 CPM= 1.6871E 15

13:15

ELAPSED TIME - 330.0 MINUTES  
 RCS Conc. 7.0000E-04  
 ISOTOPE uCi/ml in PVS  
 KR-85 1.1899E 00  
 KR-85M 2.1549E 01  
 KR-87 4.9533E 00  
 KR-88 3.7217E 01  
 I-131 1.7616E 00  
 I-132 4.8895E-01  
 I-133 2.9190E 00  
 I-134 5.1708E-02  
 I-135 1.8524E 00  
 XE-133 3.9684E 02  
 XE-135 1.2734E 02  
 TOTAL NOBLE GAS 5.8909E 02  
 TOTAL uCi/ML= 5.9616E 02  
 RE-14 CPM= 3.8586E 14

13:30

(7)

## RCS

57. MELTED FUEL - MULTIPLY ALL VALUES BY .05

ELAPSED TIME - 345.0 MINUTES  
 RCS Conc. 4.0000E-04  
 ISOTOPE uCi/ml in PVS  
 KR-85 6.7997E-01  
 KR-85M 1.1837E 01  
 KR-87 2.4687E 00  
 KR-88 1.9994E 01  
 I-131 1.0057E 00  
 I-132 2.5912E-01  
 I-133 1.6543E 00  
 I-134 2.4258E-02  
 I-135 1.0315E 00  
 XE-133 2.2783E 02  
 XE-135 7.3279E 01  
 TOTAL NOBLE GAS 3.3609E 02  
 TOTAL uCi/ML= 3.4006E 02  
 RE-14 CPM= 1.0510E 14

13:45

ELAPSED TIME - 360.0 MINUTES  
 RCS Conc. 2.0000E-04  
 ISOTOPE uCi/ml in PVS  
 KR-85 3.3998E-01  
 KR-85M 5.6897E 00  
 KR-87 1.0766E 00  
 KR-88 9.3988E 00  
 I-131 5.0240E-01  
 I-132 1.2015E-01  
 I-133 8.2034E-01  
 I-134 9.9573E-03  
 I-135 5.0264E-01  
 XE-133 1.1444E 02  
 XE-135 3.6868E 01  
 TOTAL NOBLE GAS 1.6781E 02  
 TOTAL uCi/ML= 1.6976E 02  
 RE-14 CPM= 2.1952E 13

14:00

ELAPSED TIME - 375.0 MINUTES  
 RCS Conc. 1.0000E-04  
 ISOTOPE uCi/ml in PVS  
 KR-85 1.6999E-01  
 KR-85M 2.7348E 00  
 KR-87 4.6949E-01  
 KR-88 4.4182E 00  
 I-131 2.5098E-01  
 I-132 5.5715E-02  
 I-133 4.0680E-01  
 I-134 4.0873E-03  
 I-135 2.4492E-01  
 XE-133 5.7477E 01  
 XE-135 1.8534E 01  
 TOTAL NOBLE GAS 8.3803E 01  
 TOTAL uCi/ML= 8.4766E 01  
 RE-14 CPM= 4.8123E 12

14:15

ELAPSED TIME - 390.0 MINUTES  
 RCS Conc. 6.0000E-05  
 ISOTOPE uCi/ml in PVS  
 KR-85 1.0199E-01  
 KR-85M 1.5774E 00  
 KR-87 2.4569E-01  
 KR-88 2.4923E 00  
 I-131 1.5045E-01  
 I-132 3.1002E-02  
 I-133 2.4207E-01  
 I-134 2.0133E-03  
 I-135 1.4321E-01  
 XE-133 3.4639E 01  
 XE-135 1.1173E 01  
 TOTAL NOBLE GAS 5.0230E 01  
 TOTAL uCi/ML= 5.0798E 01  
 RE-14 CPM= 1.6209E 12

14:30

## RCS

5% MELTED FUEL - MULTIPLY ALL VALUES BY .05

ELAPSED TIME - 405.0 MINUTES  
 RCS Conc. 3.0000E-05  
 ISOTOPE uCi/ml in PVS  
 KR-85 5.0997E-02  
 KR-85M 7.5818E-01  
 KR-87 1.0714E-01  
 KR-88 1.1716E 00  
 I-131 7.5158E-02  
 I-132 1.4376E-02  
 I-133 1.2004E-01  
 I-134 8.2643E-04  
 I-135 6.9784E-02  
 XE-133 1.7395E 01  
 XE-135 5.6087E 00  
 TOTAL NOBLE GAS 2.5092E 01  
 TOTAL uCi/ML= 2.5372E 01  
 RE-14 CPM= 3.8645E 11

14:45

ELAPSED TIME - 420.0 MINUTES  
 RCS Conc. 2.0000E-05  
 ISOTOPE uCi/ml in PVS  
 KR-85 3.3998E-02  
 KR-85M 4.8590E-01  
 KR-87 6.2300E-02  
 KR-88 7.3429E-01  
 I-131 5.0060E-02  
 I-132 6.8880E-03  
 I-133 7.9370E-02  
 I-134 4.5231E-04  
 I-135 4.5338E-02  
 XE-133 1.1647E 01  
 XE-135 3.7516E 00  
 TOTAL NOBLE GAS 1.6715E 01  
 TOTAL uCi/ML= 1.6899E 01  
 RE-14 CPM= 1.7070E 11

15:00

~~ELAPSED TIME - 435.0 MINUTES  
 RCS Conc. 1.0000E-05  
 ISOTOPE uCi/ml in PVS  
 KR-85 0.0000E 00  
 KR-85M 0.0000E 00  
 KR-87 0.0000E 00  
 KR-88 0.0000E 00  
 I-131 0.0000E 00  
 I-132 0.0000E 00  
 I-133 0.0000E 00  
 I-134 0.0000E 00  
 I-135 0.0000E 00  
 XE-133 0.0000E 00  
 XE-135 0.0000E 00  
 TOTAL NOBLE GAS 0.0000E 00  
 TOTAL uCi/ML= 0.0000E 00  
 RE-14 CPM= 0.0000E 00~~

INSTANTANEOUS CJMT. CONCENTRATIONS

(1)

17. FAILED FUEL - MULTIPLY ALL VALUES BY  $10^{-2}$

FAILED FUEL  
 ELAPSED TIME - 15.0 MINUTES  
 CTMT Conc 2.1600E-01  
 ISOTOPE uCi/mL in PVS  
 KR-85 5.7979E-02  
 KR-85M 2.4043E 00  
 KR-87 4.2636E 00  
 KR-88 6.6266E 00  
 I-131 4.9560E-02  
 I-132 6.5719E-03  
 I-133 9.5837E-02  
 I-134 8.9909E-02  
 I-135 8.7894E-02  
 XE-133 1.7109E 01  
 XE-135 3.6178E 00  
 TOTAL NOBLE GAS 3.4079E 01  
 TOTAL uCi/ML= 3.4468E 01  
 RE-14 CPM= 7.2331E 11

~~8:15~~

ELAPSED TIME - 30.0 MINUTES  
 CTMT Conc 3.1100E-01  
 ISOTOPE uCi/mL in PVS  
 KR-85 8.3479E-02  
 KR-85M 3.3278E 00  
 KR-87 5.3542E 00  
 KR-88 8.9701E 00  
 I-131 7.1293E-02  
 I-132 8.7753E-02  
 I-133 1.3585E-01  
 I-134 1.0628E-01  
 I-135 1.2333E-01  
 XE-133 2.4713E 01  
 XE-135 5.3353E 00  
 TOTAL NOBLE GAS 4.7784E 01  
 TOTAL uCi/ML= 4.8309E 01  
 RE-14 CPM= 1.4588E 12

8:30

ELAPSED TIME - 45.0 MINUTES  
 CTMT Conc 3.9100E-01  
 ISOTOPE uCi/mL in PVS  
 KR-85 1.0495E-01  
 KR-85M 4.0220E 00  
 KR-87 5.8712E 00  
 KR-88 1.0603E 01  
 I-131 8.9552E-02  
 I-132 1.0232E-01  
 I-133 1.7064E-01  
 I-134 1.0969E-01  
 I-135 1.5111E-01  
 XE-133 3.1116E 01  
 XE-135 6.8565E 00  
 TOTAL NOBLE GAS 5.8626E 01  
 TOTAL uCi/ML= 5.9249E 01  
 RE-14 CPM= 2.2419E 12

8:45

ELAPSED TIME - 60.0 MINUTES  
 CTMT Conc 4.5700E-01  
 ISOTOPE uCi/mL in PVS  
 KR-85 1.2267E-01  
 KR-85M 4.5190E 00  
 KR-87 5.9952E 00  
 KR-88 1.1651E 01  
 I-131 1.0457E-01  
 I-132 1.1091E-01  
 I-133 1.9781E-01  
 I-134 1.0525E-01  
 I-135 1.7212E-01  
 XE-133 3.6544E 01  
 XE-135 8.1763E 00  
 TOTAL NOBLE GAS 6.6998E 01  
 TOTAL uCi/ML= 6.7689E 01  
 RE-14 CPM= 2.9738E 12

9:00

## CTMT

(2)

17. FAILED FUEL - MULTIPLY ALL VALUES BY  $10^{-2}$ 

ELAPSED TIME - 75.0 MINUTES  
 CTMT Conc 5.1100E-01  
 ISOTOPE uCi/ml in PVS  
 KR-85 1.3716E-01  
 KR-85M 4.8575E 00  
 KR-87 5.8370E 00  
 KR-88 1.2248E 01  
 I-131 1.1683E-01  
 I-132 1.1501E-01  
 I-133 2.1937E-01  
 I-134 9.6620E-02  
 I-135 1.8755E-01  
 XE-133 4.0988E 01  
 XE-135 9.3119E 00  
 TOTAL NOBLE GAS 7.3379E 01  
 TOTAL uCi/ML= 7.4115E 01  
 RE-14 CPM= 3.6085E 12

9:15

ELAPSED TIME - 90.0 MINUTES  
 CTMT Conc 5.5600E-01  
 ISOTOPE uCi/ml in PVS  
 KR-85 1.4924E-01  
 KR-85M 5.0808E 00  
 KR-87 5.5393E 00  
 KR-88 1.2529E 01  
 I-131 1.2700E-01  
 I-132 1.1605E-01  
 I-133 2.3672E-01  
 I-134 3.6307E-02  
 I-135 1.9888E-01  
 XE-133 4.4733E 01  
 XE-135 1.0303E 01  
 TOTAL NOBLE GAS 7.8334E 01  
 TOTAL uCi/ML= 7.9099E 01  
 RE-14 CPM= 4.1479E 12

9:30

ELAPSED TIME - 105.0 MINUTES  
 CTMT Conc 5.9100E-01  
 ISOTOPE uCi/ml in PVS  
 KR-85 1.5863E-01  
 KR-85M 5.1917E 00  
 KR-87 5.1355E 00  
 KR-88 1.2520E 01  
 I-131 1.3487E-01  
 I-132 1.1440E-01  
 I-133 2.4956E-01  
 I-134 7.5315E-02  
 I-135 2.0601E-01  
 XE-133 4.7690E 01  
 XE-135 1.1121E 01  
 TOTAL NOBLE GAS 8.1818E 01  
 TOTAL uCi/ML= 8.2598E 01  
 RE-14 CPM= 4.5516E 12

9:45

ELAPSED TIME - 120.0 MINUTES  
 CTMT Conc 6.1900E-01  
 ISOTOPE uCi/ml in PVS  
 KR-85 1.6615E-01  
 KR-85M 5.2273E 00  
 KR-87 4.6913E 00  
 KR-88 1.2329E 01  
 I-131 1.4114E-01  
 I-132 1.1112E-01  
 I-133 2.5923E-01  
 I-134 6.4760E-02  
 I-135 2.1028E-01  
 XE-133 5.0096E 01  
 XE-135 1.1812E 01  
 TOTAL NOBLE GAS 8.4322E 01  
 TOTAL uCi/ML= 8.5108E 01  
 RE-14 CPM= 4.8542E 12

10:00

CTMT

(3)

12 FAILED FUEL - MULTIPLY ALL VALUES BY  $10^{-2}$

ELAPSED TIME - 135.0 MINUTES  
CTMT Conc 6.4100E-01  
ISOTOPE  $\mu\text{Ci}/\text{mL}$  in PVS  
KR-85 1.7205E-01  
KR-85M 5.2037E 00  
KR-87 4.2371E 00  
KR-88 1.2003E 01  
I-131 1.4602E-01  
I-132 1.0672E-01  
I-133 2.6624E-01  
I-134 5.5055E-02  
I-135 2.1221E-01  
XE-133 5.2026E 01  
XE-135 1.2388E 01  
TOTAL NOBLE GAS 8.6030E 01  
TOTAL  $\mu\text{Ci}/\text{mL}$ = 8.6816E 01  
RE-14 CPM= 5.0663E 12

10:15

ELAPSED TIME - 150.0 MINUTES  
CTMT Conc 6.5700E-01  
ISOTOPE  $\mu\text{Ci}/\text{mL}$  in PVS  
KR-85 1.7635E-01  
KR-85M 5.1272E 00  
KR-87 3.7878E 00  
KR-88 1.1566E 01  
I-131 1.4953E-01  
I-132 1.0144E-01  
I-133 2.7064E-01  
I-134 4.6327E-02  
I-135 3.1197E-01  
XE-133 5.3476E 01  
XE-135 1.2845E 01  
TOTAL NOBLE GAS 8.6979E 01  
TOTAL  $\mu\text{Ci}/\text{mL}$ = 8.7759E 01  
RE-14 CPM= 5.1855E 12

10:30

(4)

## CTMT

5% MELTED FUEL - MULTIPLY ALL VALUES BY .05

MELTED FUEL  
ELASPSED TIME - 165.0MINUTES  
CTMT Conc 3.3800E-01

ISOTOPE	uCi/ml in PVS
KR-85	2.7217E 00
KR-85M	7.6071E 01
KR-87	5.0989E 01
KR-88	1.6783E 02
I-131	4.0690E 00
I-132	2.5623E 00
I-133	7.3106E 00
I-134	1.0359E 00
I-135	5.6263E 00
XE-133	8.5751E 02
XE-135	2.5065E 02
TOTAL NOBLE GAS	1.4058E 03
TOTAL uCi/ML=	1.4264E 03
RE-14 CPM=	3.0984E 15

10:45

ELASPSED TIME - 180.0MINUTES  
CTMT Conc 6.2900E-01

ISOTOPE	uCi/ml in PVS
KR-85	5.0650E 00
KR-85M	1.3609E 02
KR-87	8.2760E 01
KR-88	2.9363E 02
I-131	7.5654E 00
I-132	4.4221E 00
I-133	1.3493E 01
I-134	1.5826E 00
I-135	1.0204E 01
XE-133	1.6048E 03
XE-135	4.7624E 02
TOTAL NOBLE GAS	2.5985E 03
TOTAL uCi/ML=	2.6358E 03
RE-14 CPM=	1.4049E 16

11:00

ELASPSED TIME - 195.0MINUTES  
CTMT Conc 7.7200E-01

ISOTOPE	uCi/ml in PVS
KR-85	6.2165E 00
KR-85M	1.6057E 02
KR-87	8.8593E 01
KR-88	3.3881E 02
I-131	9.2771E 00
I-132	5.0334E 00
I-133	1.6424E 01
I-134	1.5946E 00
I-135	1.2205E 01
XE-133	1.9805E 03
XE-135	5.9573E 02
TOTAL NOBLE GAS	3.1704E 03
TOTAL uCi/ML=	3.2150E 03
RE-14 CPM=	2.3094E 16

11:15

ELASPSED TIME - 210.0MINUTES  
CTMT Conc 8.3500E-01

ISOTOPE	uCi/ml in PVS
KR-85	6.7238E 00
KR-85M	1.6695E 02
KR-87	8.3576E 01
KR-88	3.4453E 02
I-131	1.0025E 01
I-132	5.0489E 00
I-133	1.7619E 01
I-134	1.4159E 00
I-135	1.2865E 01
XE-133	2.1538E 03
XE-135	6.5564E 02
NOBLE GAS	3.4112E 03
uCi/ML=	3.4582E 03
RE-14 CPM=	2.7744E 16

11:30

(5)

## CTMT

57. MELTED FUEL - MULTIPLY ALL VALUES BY .05

ELAPSED TIME - 225.0 MINUTES  
 CTMT Conc 8.5600E-01  
 ISOTOPE uCi/ml in PVS  
 KR-85 6.8928E 00  
 KR-85M 1.6453E 02  
 KR-87 7.4727E 01  
 KR-88 3.3206E 02  
 I-131 1.0268E 01  
 I-132 4.8001E 00  
 I-133 1.7913E 01  
 I-134 1.1917E 00  
 I-135 1.2852E 01  
 XE-133 2.2198E 03  
 XE-135 6.8289E 02  
 TOTAL NOBLE GAS 3.4809E 03  
 TOTAL uCi/ML= 3.5279E 03  
 RE-14 CPM= 2.9175E 16

11:45

ELAPSED TIME - 240.0 MINUTES  
 CTMT Conc 8.5600E-01  
 ISOTOPE uCi/ml in PVS  
 KR-85 6.8928E 00  
 KR-85M 1.5816E 02  
 KR-87 6.5176E 01  
 KR-88 3.1219E 02  
 I-131 1.0259E 01  
 I-132 4.4517E 00  
 I-133 1.7766E 01  
 I-134 9.7832E-01  
 I-135 1.2525E 01  
 XE-133 2.2315E 03  
 XE-135 6.9286E 02  
 TOTAL NOBLE GAS 3.4667E 03  
 TOTAL uCi/ML= 3.5127E 03  
 RE-14 CPM= 2.8860E 16

12:00

ELAPSED TIME - 255.0 MINUTES  
 CTMT Conc 8.4400E-01  
 ISOTOPE uCi/ml in PVS  
 KR-85 6.7962E 00  
 KR-85M 1.4991E 02  
 KR-87 5.6049E 01  
 KR-88 2.8939E 02  
 I-131 1.0106E 01  
 I-132 4.0706E 00  
 I-133 1.7373E 01  
 I-134 7.9190E-01  
 I-135 1.2035E 01  
 XE-133 2.2116E 03  
 XE-135 6.9222E 02  
 TOTAL NOBLE GAS 3.4059E 03  
 TOTAL uCi/ML= 3.4503E 03  
 RE-14 CPM= 2.7585E 16

12:15

ELAPSED TIME - 270.0 MINUTES  
 CTMT Conc 8.2600E-01  
 ISOTOPE uCi/ml in PVS  
 KR-85 6.6512E 00  
 KR-85M 1.4104E 02  
 KR-87 4.7843E 01  
 KR-88 2.6627E 02  
 I-131 9.8816E 00  
 I-132 3.6946E 00  
 I-133 1.6863E 01  
 I-134 6.3626E-01  
 I-135 1.1479E 01  
 XE-133 2.1754E 03  
 XE-135 6.8563E 02  
 TOTAL NOBLE GAS 3.3228E 03  
 TOTAL uCi/ML= 3.3654E 03  
 RE-14 CPM= 2.5907E 16

12:30

(6)

## CTMT

5% MELTED FUEL - MULTIPLY ALL VALUES BY .05

ELAPSED TIME - 285.0 MINUTES

CTMT Conc	8.0500E-01
ISOTOPE	uCi/ml in PVS
KR-85	6.4821E 00
KR-85M	1.3214E 02
KR-87	4.0667E 01
KR-88	2.4397E 02
I-131	9.6217E 00
I-132	3.3392E 00
I-133	1.6299E 01
I-134	5.0907E-01
I-135	1.0902E 01
XE-133	2.1307E 03
XE-135	6.7550E 02
TOTAL NOBLE GAS	3.2294E 03
TOTAL uCi/ML=	7.2701E 03
RE-14 CPM=	2.4102E 16

12:45

ELAPSED TIME - 300.0 MINUTES

CTMT Conc	7.8400E-01
ISOTOPE	uCi/ml in PVS
KR-85	6.3130E 00
KR-85M	1.2371E 02
KR-87	3.4544E 01
KR-88	2.2338E 02
I-131	9.3623E 00
I-132	3.0160E 00
I-133	1.5743E 01
I-134	4.0702E-01
I-135	1.0347E 01
XE-133	2.0853E 03
XE-135	6.6437E 02
TOTAL NOBLE GAS	3.1376E 03
TOTAL uCi/ML=	3.1765E 03
RE-14 CPM=	2.2406E 16

13:00

ELAPSED TIME - 315.0 MINUTES

CTMT Conc	7.6100E-01
ISOTOPE	uCi/ml in PVS
KR-85	6.1278E 00
KR-85M	1.1543E 02
KR-87	2.9245E 01
KR-88	2.0385E 02
I-131	9.0795E 00
I-132	2.7150E 00
I-133	1.5156E 01
I-134	3.2435E-01
I-135	9.7882E 00
XE-133	2.0339E 03
XE-135	6.5060E 02
TOTAL NOBLE GAS	3.0392E 03
TOTAL uCi/ML=	3.0762E 03
RE-14 CPM=	2.0673E 16

13:15

ELAPSED TIME - 330.0 MINUTES

CTMT Conc	7.4000E-01
ISOTOPE	uCi/ml in PVS
KR-85	5.9587E 00
KR-85M	1.0791E 02
KR-87	2.4804E 01
KR-88	1.8637E 02
I-131	8.8211E 00
I-132	2.4484E 00
I-133	1.4617E 01
I-134	2.5893E-01
I-135	9.2757E 00
XE-133	1.9872E 03
XE-135	6.3766E 02
TOTAL NOBLE GAS	2.9499E 03
TOTAL uCi/ML=	2.9853E 03
RE-14 CPM=	1.9176E 16

13:30

(7)

## CTMT

57. MELTED FUEL - MULTIPLY ALL VALUES BY .05

ELAPSED TIME - 345.0 MINUTES  
 CTMT Conc 7.1800E-01  
 ISOTOPE uCi/mL in PVS  
 KR-85 5.7815E 00  
 KR-85M 1.0065E 02  
 KR-87 2.0990E 01  
 KR-88 1.7000E 02  
 I-131 8.5511E 00  
 I-132 2.2032E 00  
 I-133 1.4066E 01  
 I-134 2.0625E -01  
 I-135 8.7709E 00  
 XE-133 1.9371E 03  
 XE-135 6.2307E 02  
 TOTAL NOBLE GAS 2.8576E 03  
 TOTAL uCi/ML= 2.8914E 03  
 RE-14 CPM= 1.7701E 16

13:45

ELAPSED TIME - 360.0 MINUTES  
 CTMT Conc 6.9700E-01  
 ISOTOPE uCi/mL in PVS  
 KR-85 5.6124E 00  
 KR-85M 9.3925E 01  
 KR-87 1.7772E 01  
 KR-88 1.5515E 02  
 I-131 8.2936E 00  
 I-132 1.9835E 00  
 I-133 1.3542E 01  
 I-134 1.6437E -01  
 I-135 8.2976E 00  
 XE-133 1.9891E 03  
 XE-135 6.3861E 02  
 TOTAL NOBLE GAS 2.7782E 03  
 TOTAL uCi/ML= 2.8045E 03  
 RE-14 CPM= 1.6371E 16

14:00

ELAPSED TIME - 375.0 MINUTES  
 CTMT Conc 6.7600E-01  
 ISOTOPE uCi/mL in PVS  
 KR-85 5.4433E 00  
 KR-85M 8.7571E 01  
 KR-87 1.5034E 01  
 KR-88 1.4147E 02  
 I-131 8.0365E 00  
 I-132 1.7840E 00  
 I-133 1.3026E 01  
 I-134 1.3088E -01  
 I-135 7.8427E 00  
 XE-133 1.8405E 03  
 XE-135 5.9348E 02  
 TOTAL NOBLE GAS 2.6835E 03  
 TOTAL uCi/ML= 2.7143E 03  
 RE-14 CPM= 1.5116E 16

14:15

ELAPSED TIME - 390.0 MINUTES  
 CTMT Conc 6.5600E-01  
 ISOTOPE uCi/mL in PVS  
 KR-85 5.2823E 00  
 KR-85M 8.1692E 01  
 KR-87 1.2724E 01  
 KR-88 1.2907E 02  
 I-131 7.7917E 00  
 I-132 1.6056E 00  
 I-133 1.2537E 01  
 I-134 1.0427E -01  
 I-135 7.4169E 00  
 XE-133 1.7940E 03  
 XE-135 5.7863E 02  
 TOTAL NOBLE GAS 2.6014E 03  
 TOTAL uCi/ML= 2.6309E 03  
 RE-14 CPM= 1.3983E 16

14:30

(8)

## CTMT

S% MELTED FUEL - MULTIPLY ALL VALUES BY .05

ELAPSED TIME - 405.0 MINUTES

CTMT Conc	uCi/ml in PVS
ISOTOPE	
KR-85	5.1292E 00
KR-85M	7.6257E 01
KR-87	1.0776E 01
KR-88	1.1783E 02
I-131	7.5593E 00
I-132	1.4459E 00
I-133	1.2074E 01
I-134	8.3121E-02
I-135	7.0188E 00
XE-133	1.7496E 03
XE-135	5.6412E 02
TOTAL NOBLE GAS	2.5237E 03
TOTAL uCi/ML=	2.5519E 03
RE-14 CPM=	1.2962E 16

14:45

ELAPSED TIME - 420.0 MINUTES

CTMT Conc	uCi/ml in PVS
ISOTOPE	
KR-85	4.9762E 00
KR-85M	7.1121E 01
KR-87	9.1188E 00
KR-88	1.0748E 02
I-131	7.3272E 00
I-132	1.3009E 00
I-133	1.1617E 01
I-134	6.6204E-02
I-135	6.6361E 00
XE-133	1.7047E 03
XE-135	5.4912E 02
TOTAL NOBLE GAS	2.4465E 03
TOTAL uCi/ML=	2.4735E 03
RE-14 CPM=	1.1993E 16

15:00

ELAPSED TIME - 435.0 MINUTES

CTMT Conc	uCi/ml in PVS
ISOTOPE	
KR-85	0.0000E 00
KR-85M	0.0000E 00
KR-87	0.0000E 00
KR-88	0.0000E 00
I-131	0.0000E 00
I-132	0.0000E 00
I-133	0.0000E 00
I-134	0.0000E 00
I-135	0.0000E 00
XE-133	0.0000E 00
XE-135	0.0000E 00
TOTAL NOBLE GAS	0.0000E 00
TOTAL uCi/ML=	0.0000E 00
RE-14 CPM=	0.0000E 00

FIRST TIME LAPSE (1500 to 1600 hrs actual time)

Simulated Time 2300 hours 2/9/83

SB Dose Rate from Last Puff = 24 mR/hr WB  
1.4 mR/hr Thy

Release is terminated by cycling the purge valves and obtaining full closure

R-27 reading is 4.6E2

All effluent monitors are back on-scale at normal values

Wind direction is from 010 Degrees  
3.9 mph  
Stability Class D

SECOND TIME LAPSE (1600 to 1700 hrs actual time)

Simulated Time: 0800 hours 2/11/83

RCS cooled to 200°F and on RHR

R-27 reading is 4 R/hr

No release indicated by effluent monitors