

EMERGENCY PLAN PROCEDURES INDEX

PEACH BOTTOM UNITS 2 AND 3

| <u>Number</u> | <u>Title</u>   | <u>Review Date</u> | <u>Rev. No.</u> | <u>Revision Date</u> |
|---------------|--|--------------------|-----------------|----------------------|
| EP-101        | Classification of Emergencies  | 01/10/84           | 8               | 01/10/84             |
| EP-102        | Unusual Event Response   | 09/15/84           | 9               | 09/15/84 *           |
| EP-103        | Alert Response   | 09/20/84           | 10              | 09/20/84 *           |
| EP-104        | Site Emergency Response  | 09/21/84           | 10              | 09/21/84 *           |
| EP-105        | General Emergency Response   | 09/21/84           | 10              | 09/21/84 *           |
| EP-110        | Personnel Assembly and Accountability  | 06/20/83           | 1               | 06/20/83             |
| EP-201        | Technical Support Center (TSC)<br>Activation   | 08/01/83           | 6               | 08/01/83             |
| EP-202        | Operations Support Center (OSC)<br>Activation  | 10/27/83           | 5               | 10/27/83             |
| EP-203        | Emergency Operations Facility (EOF)<br>Activation  | 08/01/83           | 6               | 08/01/83             |
| EP-205        | D E L E T E D  | D E L E T E D      |                 | *                    |
| EP-205A       | Chemistry Sampling and Analysis Group  | 09/18/84           | 5               | 09/18/84 *           |
| EP-205A<br>.1 | Operation of Post Accident Sampling<br>Station   | 09/20/84           | 5               | 09/20/84 *           |
| EP-205A<br>.2 | Obtaining Drywell Gas Samples<br>from Containment Atmosphere Dilution<br>Cabinets                                    | 05/26/82           | 0               | 05/26/82             |
| EP-205A<br>.3 | Retrieving and Changing Sample<br>Filters and Cartridges from the<br>Drywell Radiation Monitor During<br>Emergencies | 04/25/83           | 1               | 04/25/83             |
| EP-205A<br>.4 | Obtaining Drywell Gas Samples<br>from the Drywell Radiation Monitor<br>Sampling Station                              | 05/25/82           | 0               | 05/25/82             |
| EP-205A<br>.5 | Obtaining Reactor Water Samples<br>from Sample Sinks Following Accident<br>Conditions                                | 05/25/82           | 0               | 05/25/82             |
| EP-205A<br>.6 | Obtaining Canal Discharge Water<br>Samples Following Radioactive Liquid<br>Releases After Accident Conditions        | 05/25/82           | 0               | 05/25/82             |

B411070182 841011  
 PDR ADOCK 05000277  
 F PDR

CONTROLLED APPROVED COPY  
 VOID PREVIOUS ISSUE  
 DISTRIBUTION PER A-2

## EMERGENCY PLAN PROCEDURES INDEX

EP Index  
Page 2  
Rev. 43 \*  
09/21/84 \*

## PEACH BOTTOM UNITS 2 AND 3

| <u>Number</u>  | <u>Title</u>  | <u>Review<br/>Date</u> | <u>Rev.<br/>No.</u> | <u>Revision<br/>Date</u> |
|----------------|---|------------------------|---------------------|--------------------------|
| EP-205A<br>.7  | Obtaining the Iodine and Particulate Samples from the Main Stack and Roof Vents Following Accident Conditions | 11/21/83               | 2                   | 11/21/83                 |
| EP-205A<br>.8  | Obtaining Liquid Radwaste Samples from Radwaste Sample Sink Following Accident Conditions                     | 05/25/82               | 0                   | 05/25/82                 |
| EP-205A<br>.9  | Obtaining Samples from Condensate Sample Sink Following Accident Conditions                                   | 05/25/82               | 0                   | 05/25/82                 |
| EP-205A<br>.10 | Obtaining Off-Gas Samples from the Off-Gas Hydrogen Analyzer Following Accident Conditions                    | 05/25/82               | 0                   | 05/25/82                 |
| EP-205A<br>.11 | Sample Preparation and Handling of Highly Radioactive Liquid Samples  | 02/29/84               | 2                   | 02/29/84                 |
| EP-205A<br>.12 | Sample Preparation and Handling of Highly Radioactive Particulate Filters and Iodine Cartridges               | 01/10/84               | 3                   | 01/10/84                 |
| EP-205A<br>.13 | Sample Preparation and Handling of Highly Radioactive Gas Samples   | 02/29/84               | 2                   | 02/29/84                 |
| EP-205A<br>.14 | Offsite Analysis of High Activity Samples   | 11/23/83               | 0                   | 11/23/83                 |
| EP-205A<br>.15 | Guidelines for the Order of Analysis on Post-Accident Samples   | 02/29/84               | 0                   | 02/29/84                 |
| EP-205B        | Radiation Survey Groups   | 09/18/84               | 5                   | 09/18/84 *               |
| EP-205C        | Personnel Dosimetry Bioassay and Respiratory Protection Group   | 09/20/84               | 3                   | 09/20/84 *               |
| EP-206         | D E L E T E D   | D E L E T E D          |                     |                          |
| EP-206A        | Fire Fighting Group   | 01/10/84               | 6                   | 01/10/84                 |
| EP-206B        | Damage Repair Group   | 05/31/83               | 3                   | 05/31/83                 |
| EP-207         | Personnel Safety Team Activation  | 09/20/84               | 6                   | 09/20/84 *               |
| EP-207A        | Search and Rescue   | 04/13/83               | 3                   | 04/13/83                 |
| EP-207B        | D E L E T E D   | D E L E T E D          |                     |                          |
| EP-207C        | First Aid   | 02/29/84               | 4                   | 02/29/84                 |



## EMERGENCY PLAN PROCEDURES INDEX

EP Index  
 Page 3  
 Rev. 43 \*  
 09/21/84 \*

## PEACH BOTTOM UNITS 2 AND 3

| <u>Number</u>          | <u>Title</u>   | <u>Review Date</u> | <u>Rev. No.</u> | <u>Revision Date</u> |
|------------------------|--|--------------------|-----------------|----------------------|
| EP-207D                | Evacuation Assembly Group                              | 04/25/83           | 3               | 04/25/83             |
| EP-207E                | Vehicle and Evacuee Control Procedure                  | 08/01/83           | 2               | 08/01/83             |
| EP-207F                | Vehicle Decontamination Procedure                      | 05/31/83           | 1               | 05/31/83             |
| EP-208                 | Security Team  | 05/31/83           | 1               | 05/31/83             |
| EP-209                 | Telephone List For Emergency Use                       | 09/21/84           | 7               | 09/21/84 *           |
| EP-209<br>Appendix A   | Immediate Notification Call List                       | 08/23/83           | 8               | 06/24/83             |
| EP-209<br>Appendix B   | DELETED  | DELETED            |                 |                      |
| EP-209<br>Appendix C   | Peach Bottom Station Supervision                       | 09/21/84           | 13              | 09/21/84 *           |
| EP-209<br>Appendix D-1 | On Site Emergency Team Leaders                         | 07/19/84           | 9               | 07/19/84             |
| EP-209<br>Appendix D-2 | Radiation Protection Team                              | 07/19/84           | 13              | 07/19/84             |
| EP-209<br>Appendix D-3 | Fire and Damage Team                                   | 08/27/84           | 11              | 08/27/84             |
| EP-209<br>Appendix D-4 | Personnel Safety Team                                  | 07/19/84           | 13              | 07/19/84             |
| EP-209<br>Appendix D-5 | Security Team  | 07/19/84           | 8               | 07/19/84             |
| EP-209<br>Appendix D-6 | Re-Entry and Recovery Team                             | 08/23/83           | 3               | 04/11/83             |
| EP-209<br>Appendix D-7 | Technical Support Center Group                         | 09/15/84           | 13              | 09/15/84 *           |
| EP-209<br>Appendix D-8 | Chemistry Sampling & Analysis Team                     | 09/20/84           | 0               | 09/20/84 *           |
| EP-209<br>Appendix E   | Corporate Emergency Team Leaders and Support Personnel | 01/10/84           | 10              | 01/10/84             |
| EP-209<br>Appendix F   | U. S. Government Agencies                              | 08/23/83           | 5               | 06/24/83             |

## EMERGENCY PLAN PROCEDURES INDEX

EP Index

Page 4

Rev. 43 \*

09/21/84 \*

## PEACH BOTTOM UNITS 2 AND 3

| <u>Number</u>          | <u>Title</u>   | <u>Review<br/>Date</u> | <u>Rev.<br/>No.</u> | <u>Revision<br/>Date</u> |
|------------------------|--|------------------------|---------------------|--------------------------|
| EP-209<br>Appendix G   | Emergency Management Agencies  | 08/23/83               | 3                   | 04/11/83                 |
| EP-209<br>Appendix H   | Company Consultants  | 01/10/84               | 8                   | 01/10/84                 |
| EP-209<br>Appendix I-1 | Field Support Personnel  | 09/20/84               | 15                  | 09/20/84 *               |
| EP-209<br>Appendix I-2 | Chemistry & Health Physics Contractor<br>Call List   | 09/15/84               | 12                  | 09/15/84 *               |
| EP-209<br>Appendix J   | Nearby Public and Industrial Users<br>Of Downstream Waters   | 08/23/83               | 5                   | 06/24/83                 |
| EP-209<br>Appendix K   | Miscellaneous  | 08/23/83               | 6                   | 06/24/83                 |
| EP-209<br>Appendix L   | Local PECO Phones  | 03/08/84               | 5                   | 03/08/84                 |
| EP-209<br>Appendix M   | D E L E T E D  | D E L E T E D          |                     |                          |
| EP-209<br>Appendix N   | Medical Support Groups   | 08/23/83               | 6                   | 06/24/83                 |
| EP-209<br>Appendix P   | Staffing Augmentation - 60 Minute<br>Call Procedure  | 01/10/84               | 8                   | 01/10/84                 |
| EP-210                 | Dose Assessment Team   | 09/18/84               | 1                   | 09/18/84 *               |
| EP-301                 | Operating the Evacuation Alarm and<br>Pond Page System   | 12/23/82               | 1                   | 12/23/82                 |
| EP-303                 | Partial Plant Evacuation   | 06/20/83               | 2                   | 06/20/83                 |
| EP-304                 | D E L E T E D  |                        |                     |                          |
| EP-305                 | Site Evacuation  | 06/21/83               | 5                   | 06/21/83                 |
| EP-306                 | Evacuation of the Information Center   | 05/25/82               | 2                   | 05/25/82                 |
| EP-307                 | Reception and Orientation of Support<br>Personnel  | 09/18/84               | 1                   | 09/18/84 *               |
| EP-311                 | Handling Personnel with Serious<br>Injuries, Radioactive Contamination<br>Exposure, or Excessive Radiation |                        |                     |                          |

## EMERGENCY PLAN PROCEDURES INDEX

EP Index  
Page 5  
Rev. 13 \*  
09/21/84 \*

## PEACH BOTTOM UNITS 2 AND 3

| <u>Number</u> | <u>Title</u>   | <u>Review<br/>Date</u> | <u>Rev.<br/>No.</u> | <u>Revision<br/>Date</u> |
|---------------|--|------------------------|---------------------|--------------------------|
|               | Exposure Emergency Director Functions  | 04/08/82               | 3                   | 04/08/82                 |
| EP-312        | Radioactive Liquid Release (Emergency Director Functions)                        | 09/20/84               | 2                   | 09/20/84 *               |
| EP-313        | Control of Thyroid Blocking (KI) Tablets   | 09/20/84               | 1                   | 09/20/84 *               |
| EP-316        | Cumulative Population Dose Calculations  | 09/20/84               | 5                   | 09/20/84 *               |
| EP-316A       | Reading the Rapid Dose Assessment I Program into the TI-59                       | 08/21/84               | 0                   | 08/21/84                 |
| EP-316B       | Calculating Rapid Dose Assessment on the TI-59                                   | 08/21/84               | 0                   | 08/21/84                 |
| EP-317        | Direct Recommendations to County Emergency Management and Civil Defense Agencies | 05/31/83               | 2                   | 05/31/83                 |
| EP-318        | Liquid Release Dose Calculation Method for Intake Water at Downstream Facilities | 04/13/83               | 1                   | 04/13/83                 |
| EP-319        | Liquid Release Dose Calculation Method for Fish                                  | 04/13/83               | 1                   | 03/13/83                 |
| EP-320        | Procedure for Leaking Chlorine   | 03/12/82               | 1                   | 03/12/82                 |
| EP-325        | Use of the Containment Radiation Monitor to Estimate Release Source Term         | 06/09/82               | 0                   | 06/09/82                 |
| EP-401        | Entry for Emergency Repair and Operations  | 09/15/84               | 5                   | 09/15/84 *               |
| EP-500        | Review and Revision of Emergency Plan (FSAR Appendix 0)                          | 04/01/81               | 0                   | 04/01/81                 |

CONTROLLED APPROVED COPY-4  
VOID PREVIOUS ISSUE  
DISTRIBUTION PAR A-2

*RLG:paa*  
9-15-84

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-102 - UNUSUAL EVENT RESPONSE

PURPOSE

To define site response to an Unusual Event.

REFERENCES

1. Peach Bottom Atomic Power Station Emergency Plan
2. NUREG 0654
3. GP-15            Local Evacuation
4. EP-101          Classification of Emergencies

APPENDIX

- EP 102-1 Unusual Event Notification Checkoff List  
EP 102-2 Unusual Event De-escalation Checkoff List

IMMEDIATE ACTIONS

- 1.0 Shift Supervision shall:
    - 1.1 Assume the role of Interim Emergency Director.
    - 1.2 Activate Emergency Teams as necessary.
    - 1.3 Direct the evacuation of affected areas as necessary.  
Refer to the following procedure:  
  
GP-15    Local Evacuation
    - 1.4 Contact the Station Superintendent and the Shift Technical Advisor and inform them of the situation.
    - 1.5 Fill out the Standard Prompt Notification message in Appendix EP 102-1 or 102-2, and direct the communicator (PO or higher) to notify the appropriate parties.
- DO NOT USE BLUE RINGDOWN PHONE FOR THESE CALLS.
- 1.6 Closely monitor conditions to determine present hazards to personnel and potential accident conditions that may develop.



2.0 Communicator shall:

- 2.1 Using the Standard Prompt Notification message notify the appropriate parties in Appendix EP-102-1 or 102-2. (See Appendix A for additional telephone numbers).

FOLLOW-UP ACTIONS

1.0 Emergency Director shall:

- 1.1 Periodically evaluate the event classification in accordance with EP 101, Classification of Emergencies and escalate or deescalate the classification as necessary.

If classification is de-escalated, fill out Appendix EP-102-2, and direct the communicator to notify the appropriate parties.

DO NOT USE THE BLUE RING-DOWN PHONES FOR THESE CALLS.

- 1.2 Direct the Shift Clerk to contact additional support personnel that are necessary for emergency functions.

2.0 Shift Clerk shall:

- 2.1 Notify additional support personnel to report to the plant as directed by the Emergency Director.

APPENDIX EP 102-1  
UNUSUAL EVENT NOTIFICATION CHECKOFF LIST

MESSAGE: THIS IS PEACH BOTTOM ATOMIC POWER STATION CALLING TO REPORT AN UNUSUAL EVENT. PLEASE CONNECT ME TO THE APPROPRIATE AUTHORITY. THIS (IS) (IS NOT) A DRILL. THIS (IS) (IS NOT) A DRILL. THIS IS PEACH BOTTOM ATOMIC POWER STATION CALLING TO REPORT AN UNUSUAL EVENT HAS BEEN DECLARED ON UNIT NO. \_\_\_\_ . THIS IS NOT AN EMERGENCY CONDITION. TIME AND DATE OF UNUSUAL CLASSIFICATION IS \_\_\_\_ . THE BASIC PROBLEM IS \_\_\_\_\_ . THE PLANT STATUS IS (STABLE AND ALL PERSONNEL AND EQUIPMENT ARE IN A SAFE CONDITION, THEREFORE THERE WILL BE NO FURTHER Notification) (STABLE) (IMPROVING) (DEGRADING) (NOT KNOWN) . THERE (HAS BEEN) (HAS NOT BEEN) AND (AIRBORNE) (LIQUID) RADIOACTIVE RELEASE FROM THE PLANT. PROTECTIVE ACTIONS RECOMMENDED ARE (NONE) \_\_\_\_\_ . THE AFFECTED POPULATION AREA IS (NONE) \_\_\_\_\_ . MY NAME IS \_\_\_\_\_ . THIS (IS) (IS NOT) A DRILL.

Notifications:

| <u>Party</u>  | <u>Name of Person Responding</u> | <u>Time of Notification</u> | <u>Communicator's Initials</u> |
|---|----------------------------------|-----------------------------|--------------------------------|
| Station Supt.   | _____                            | _____                       | _____                          |
| Load Dispatcher   | _____                            | _____                       | _____                          |
| Pennsylvania Emergency Management Agency                | _____                            | _____                       | _____                          |
| York County Emergency Management Agency                 | _____                            | _____                       | _____                          |
| PA. Bureau of Rad. Protection<br>(White Phone or _____) | _____                            | _____                       | _____                          |

APPENDIX EP 102-1 (Cont'd)  
UNUSUAL EVENT NOTIFICATION CHECKOFF LIST

NRC Operations Center  
Red Phone \_\_\_\_\_

Manager-Public  
Information  
or pager \_\_\_\_\_

PBAPS Guard Sergeant  
\_\_\_\_\_

Time Notifications of above parties completed \_\_\_\_\_  
Verified By \_\_\_\_\_ Date \_\_\_\_\_  
(Emerg. Director)

APPENDIX EP 102-2  
UNUSUAL EVENT DE-ESCALATION CHECKOFF LIST

MESSAGE: THIS IS PEACH BOTTOM ATOMIC POWER STATION CALLING TO DE-ESCALATE AN UNUSUAL EVENT. PLEASE CONNECT ME WITH THE APPROPRIATE AUTHORITY. THIS (IS) (IS NOT) A DRILL. THIS (IS) (IS NOT) A DRILL. THIS IS PEACH BOTTOM ATOMIC POWER STATION CALLING TO REPORT THE TERMINATION OF AN UNUSUAL EVENT. THERE IS NO POTENTIAL FOR SAFETY DEGRADATION. MY NAME IS \_\_\_\_\_ . TIME AND DATE IS \_\_\_\_\_ . THIS (IS) (IS NOT) A DRILL.

Notifications:

| <u>Party</u>  | <u>Name of Person Responding</u> | <u>Time of Notification</u> | <u>Communicator's Initials</u> |
|---|----------------------------------|-----------------------------|--------------------------------|
| Station Supt.   | _____                            | _____                       | _____                          |
| Load Dispatcher<br>[REDACTED]                                   | _____                            | _____                       | _____                          |
| Pennsylvania Emergency Management Agency<br>[REDACTED]          | _____                            | _____                       | _____                          |
| York County Emergency Management Agency<br>[REDACTED]           | _____                            | _____                       | _____                          |
| PA. Bureau of Rad. Protection<br>(White Phone or<br>[REDACTED]) | _____                            | _____                       | _____                          |
| NRC Operations Center<br>(Red Phone)                            | _____                            | _____                       | _____                          |
| Manager-Public Information<br>[REDACTED]                        | _____                            | _____                       | _____                          |
| or pager<br>[REDACTED]  | _____                            | _____                       | _____                          |
| PBAPS Guard Sergeant<br>[REDACTED]                              | _____                            | _____                       | _____                          |

Time Notifications of above parties completed \_\_\_\_\_ .  
Verified By \_\_\_\_\_ Date \_\_\_\_\_  
(Emerg. Director)



*RP*  
9-20-84

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-103 ALERT RESPONSE

PURPOSE

To define site response to an Alert.

REFERENCES

1. Peach Bottom Atomic Power Station Emergency Plan
2. NUREG 0654
3. GP-15 Local Evacuation
4. EP-101 Classification of Emergencies

APPENDICES

- EP-103-1 Alert Notification Checkoff List
- EP-103-2 Personnel Call Record
- EP-103-3 Emergency Exposure Limits (Emergency Plan Table 6.1)
- EP-103-4 Alert, Deescalation Notification Check-off List

PRECAUTIONS

1. Planned radiation exposures should be limited to the administrative guide levels in Appendix EP-103-3, Emergency Exposure Limits.

IMMEDIATE ACTIONS

- 1.0 Shift Supervision shall:
  - 1.1 Assume the role of Interim Emergency Director.
  - 1.2 Activate Emergency Teams as necessary.
  - 1.3 Direct the evacuation of affected areas as necessary. Refer to the following procedures:

- GP-15 Local Evacuation
- EP-303 Partial Plant Evacuation
- EP-305 Site Evacuation

EP-306 Evacuation of the Information Center

- 1.4 Contact the Station Superintendent and the Shift Technical Advisor, inform them of the situation.
  - 1.5 Fill out the Standard Prompt Notification message check-off Appendix EP-103-1 and give it to the Communicator (PO or higher classification) and direct the Communicator to commence notification of the appropriate parties as specified in Section 2.1 of this procedure. The Communicator shall man the NRC RED telephone on a continuous basis if required by procedure A-31. If Communicator is required for urgent plant operations related to the emergency, the concurrence for securing the phone should be obtained from the NRC prior to securing this telephone.
  - 1.6 Direct the Shift Clerk to activate the 60 minute call list using EP-209 APP P. If Shift Clerk is not available, this function shall be assigned to any available individual.
  - 1.7 Direct one of the on-shift I&C Technicians to activate the Technical Support Center and Emergency Operations Facility in accordance with EP-201 and EP-203. Inform shift clerk which I&C technician will activate the centers at Unit 1 in order that the clerk will know which remaining I&C technician to call for the prompt mobilization procedure.
  - 1.8 Direct the Personnel Safety Team Leader to initiate on-site radiation surveys as necessary, in accordance with EP-205B, Radiation Survey Groups.
  - 1.9 Assign an Operations Support Center Coordinator (senior shift PO or APO available) and direct available shift personnel to report to the Operations Support Center on 135' elev. turbine bldg. and to activate it in accordance with EP-202, if habitable. If this Operations Support Center is NOT habitable, direct shift personnel to report to the Control Room.
  - 1.10 Closely monitor conditions to determine present hazards to personnel and potential accident conditions that may develop.
  - 1.11 If release has occurred, dispatch a Plant Survey Group member to obtain a site boundary dose rate as soon as practicable.
  - 1.12 If necessary, initiate implementation of EP-317 & EP-316. Direct recommendations to County Emergency Management Agencies and cumulative population dose calculations.
- 2.0 Communicator shall:-----
- 2.1 Perform notifications on Appendix 103-1 using the alert Notification Check Off Appendix EP-103-1. See EP-209, Appendix A for additional telephone numbers.

- 2.2 Report to the Emergency Director or Interim Emergency Director when notifications are complete.
- 2.3 Man the RED NRC telephone if required by A-31 until situation stabilizes and RED telephone communication may be secured.
- 3.0 Operations Support Center Coordinator or his designee shall:
  - 3.1 Activate the Operations Support Center on 135' elev. turbine bldg., if it is habitable, in accordance with EP-202. If this Operations Support Center is not habitable, report to the Control Room.
- 4.0 Personnel Safety Team Leader shall:
  - 4.1 Initiate onsite radiation surveys in accordance with EP-205B, Radiation Survey Groups when directed by the Emergency Director. (The HP field office on 116' elev. turb. bldg. will serve as the HP&C OSC).
- 5.0 Shift I&C Technician shall:
  - 5.1 Activate the TSC and EOF when directed by Interim Emergency Director in accordance with EP-201 using Appendix EP-201-2.
- 6.0 Shift Clerk shall:
  - 6.1 Contact individuals on EP-209 APP P to call in those individuals to man TSC and required Emergency Teams (60 minute call list). Document contacts on EP-209 APP P.
  - 6.2 Inform Interim Emergency Director or Emergency Director when contacts are completed.

FOLLOW-UP ACTIONS

- 1.0 Emergency Director shall:
  - 1.1 Periodically evaluate the event classification in accordance with EP-101, Classification of Emergencies, and escalate or deescalate the classification, as necessary.
  - 1.2 Obtain the results of the Cumulative Population Dose Calculations from the Dose Assessment Team Leader and onsite radiation surveys from the Personnel Safety Team Leader, as necessary.
  - 1.3 Perform actions as necessary to mitigate conditions of the emergency situation.
  - 1.4 Determine which additional support personnel are necessary for emergency functions and direct the Shift Clerk or other assigned communicator in TSC to contact those personnel.

1.5 Provide site personnel with P.A. speaker announcements for any major changes in plant emergency status, such as changing emergency action levels and evacuations.

2.0 Station Superintendent shall:

2.1 Report to the Technical Support Center or Control Room for a briefing of the situation.

2.2 Assume the role of Emergency Director by formally relieving the Interim Emergency Director (Shift Superintendent). Announce that he has assumed the role of Emergency Director to the assembled Technical Support Center personnel.

2.3 Verify the emergency classification.

2.4 Verify that the Technical Support Center, the Emergency Operations Facility, and the Operations Support Center have been activated.

3.0 Operations Support Center Coordinator shall:

3.1 Notify the Interim Emergency Director when their respective Operations Support Center is activated.

3.2 Support the Control Room and Shift Supervision as necessary.

4.0 Dose Assessment Team Leader shall:

4.1 Report progress and results of Cumulative Population Dose Calculations to the Emergency Director as necessary.

5.0 Personnel Safety Team Leader shall:

5.1 Report progress and results of onsite radiation surveys to the Emergency Director as necessary.

6.0 Shift Clerk or assigned TSC communicator shall:

6.1 Notify additional support personnel to report to the plant as directed by the Interim Emergency Director. Refer to EP-209. Document on APP EP-103-2.

6.2 Notify the Interim Emergency Director when the additional support personnel have been notified.

7.0 Shift I&C Technician shall:

7.1 Inform the Interim Emergency Director when the TSC and EOF are activated.

7.2 Station himself at the TSC as data display (CCTV) operator as directed by the Emergency Director.



APPENDIX EP-103-1  
ALERT CHECKOFF LIST

MESSAGE: This (is) (is not) a drill. This (is) (is not) a drill. This is Peach Bottom Atomic Power Station calling to report an Alert has been declared on Unit No. \_\_\_\_\_. Time and date of Alert classification is \_\_\_\_\_. The basic problem is \_\_\_\_\_







The plant status is (stable) (improving) (degrading) (not known). There (is presently) (has not been) (is potential for) (has been) a radioactive (airborne) (liquid) release from the plant (at a level below that considered a public hazard) (at a level at which protective action is advisable).

Recommended protective actions are (none) \_\_\_\_\_.  
\_\_\_\_\_. The affected population area is (none) \_\_\_\_\_. My name is \_\_\_\_\_  
\_\_\_\_\_. This (is) (is not) a drill. This (is) (is not) a drill.

NOTIFICATIONS:

| <u>PARTY</u>   | <u>PERSON RESPONDING</u> | <u>TIME OF NOTIFICATION</u> | <u>COMMUNICATOR'S INITIALS</u> |
|--|--------------------------|-----------------------------|--------------------------------|
| Station Superintendent   | _____                    | _____                       | _____                          |
| Load Dispatcher<br>(Tell him to initiate call list "C")            | _____                    | _____                       | _____                          |
| Pennsylvania Emergency Management Agency*<br>(Blue Phone or _____) | _____                    | _____                       | _____                          |
| Maryland Civil Defense Agency<br>(Blue Phone or _____)             | _____                    | _____                       | _____                          |
| York County Emergency Management Agency<br>(Blue Phone or _____)   | _____                    | _____                       | _____                          |

APPENDIX EP-103-1 (Cont'd)  
ALERT CHECKOFF LIST

|  |       |       |       |
|--|-------|-------|-------|
| Lancaster County<br>Emergency Management<br>Agency<br>(Blue Phone or  | _____ | _____ | _____ |
| Chester County<br>Emergency Management<br>Agency<br>(Blue Phone or    | _____ | _____ | _____ |
| Harford County Civil<br>Defense Agency<br>(Blue Phone or              | _____ | _____ | _____ |
| Cecil County Civil<br>Defense Agency<br>(Blue Phone or                | _____ | _____ | _____ |
| NRC Operations Center<br>(Red Phone)   | _____ | _____ | _____ |
| PA BRP<br>(White Phone or   | _____ | _____ | _____ |
| PEAPS Guard<br>Sergeant   | _____ | _____ | _____ |

Time notifications of parties above completed \_\_\_\_\_.

Verified By \_\_\_\_\_ Date \_\_\_\_\_  
Emergency Director

\*Must notify PEMA by use of commercial telephone no. on  
backshifts. (Blue Phone not manned by PEMA on  
backshifts).

File under Sys-3-1



APPENDIX EP 103-3  
Emergency Exposure Limits

| <u>Function</u>                                    | <u>Projected Whole Body Dose</u> | <u>Thyroid Dose</u>       | <u>Authorized By</u>    |
|--|----------------------------------|---------------------------|-------------------------|
| 1. Life Saving and Reduction of Injury             | 75 rem*                          | 375 rem                   | Emergency**<br>Director |
| 2. Operation of Equipment to Mitigate an Emergency | 25 rem*                          | 125 rem                   | Emergency**<br>Director |
| 3. Protection of Health and Safety of the Public   | 5 rem                            | 25 rem                    | Emergency<br>Director   |
| 4. Other Emergency Activities                      | 10 CFR 20 limits                 | 10 CFR 20 limits          | Emergency<br>Director   |
| 5. Re-entry/Recovery Activities                    | Administrative Guidelines        | Administrative Guidelines | N/A                     |

\*Reference: EPA-520/1-75-001 Table 2.1

\*\*Such exposure shall be on a voluntary basis



APPENDIX EP-103-4  
ALERT, DEESCALATION NOTIFICATION CHECK-OFF LIST

MESSAGE: This (is) (is not) a drill. This (is) (is not) a drill.

This is Peach Bottom Atomic Power Station calling to report a change in emergency action level. The alert has been deescalated to an Unusual Event.

Time and date is \_\_\_\_\_. The basic problem is \_\_\_\_\_

\_\_\_\_\_. The plant status is (stable) (improving) (degrading) (not known). There (has been) (has not been) an (airborne)


(liquid) radioactive release from the plant. Protective actions recommended are (none) \_\_\_\_\_.


The affected population area is (none) \_\_\_\_\_. My name is \_\_\_\_\_. This (is) (is not) a drill.


Notifications:

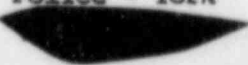
| <u>Party</u>  | <u>Person Responding</u> | <u>Time of Notification</u> | <u>Communicator's Initials</u> |
|---|--------------------------|-----------------------------|--------------------------------|
| Station Superintendent  | _____                    | _____                       | _____                          |
| Load Dispatcher<br>(Tell him to initiate call list "C")               | _____                    | _____                       | _____                          |
| Pennsylvania Emergency Management Agency*<br>(Blue phone or _____)    | _____                    | _____                       | _____                          |
| Maryland Civil Defense Agency<br>(Blue phone or _____)                | _____                    | _____                       | _____                          |
| York County Emergency Management Agency<br>(Blue phone or _____)      | _____                    | _____                       | _____                          |
| Lancaster County Emergency Management Agency<br>(Blue phone or _____) | _____                    | _____                       | _____                          |


APPENDIX EP-103-4  
ALERT, DEESCALATION NOTIFICATION CHECK-OFF LIST

Chester County Emer-  
gency Management  
Agency  
(Blue phone or  \_\_\_\_\_


Harford County Civil  
Defense Agency  
(Blue phone or  \_\_\_\_\_

Cecil County Civil  
Defense Agency  
(Blue phone or  \_\_\_\_\_

Pennsylvania State  
Police - York  
 \_\_\_\_\_

PA. BRP  
(White Phone or  \_\_\_\_\_

NRC Operations Center\*\*  
(Red Phone) \_\_\_\_\_

PEAPS Guard Sergeant  
 \_\_\_\_\_

Time notification of parties above completed. \_\_\_\_\_

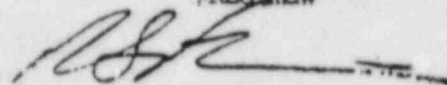
Verified by \_\_\_\_\_ Date \_\_\_\_\_  
Emergency Director

File Sys-3-1

\* Must notify PEMA by use of commercial telephone no. on backshifts.  
(Blue phone not manned by PEMA on backshifts).

CONTROLLED APPROVED COPY-  
VOID PREVIOUS ISSUE  
DISTRIBUTION PER A-2

EP-104  
Page 1 of 11, Rev. 10  
RLG:mdw



9-21-84

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-104 SITE EMERGENCY RESPONSE

PURPOSE

To define the site response to a Site Emergency.

REFERENCES

1. Peach Bottom Atomic Power Station Emergency Plan
2. NUREG 0654
3. EP-101 Classification of Emergencies

APPENDICES

- EP 104-1 Site Emergency Notification Checkoff List
- EP-104-2 Personnel Call Record
- EP 104-3 Emergency Exposure Limits (Emergency Plan Table 6.1)
- EP-104-4 Site Emergency Deescalation Notification Checkoff List

PRECAUTIONS

1. Planned radiation exposures should be limited to the administration guide levels in Appendix EP 104-3, Emergency Exposure Limits.

IMMEDIATE ACTIONS

- 1.0 Shift Supervision shall:
  - 1.1 Assume the role of Interim Emergency Director.
  - 1.2 If not already done at an earlier emergency action level, activate Emergency Teams as necessary.
  - 1.3 Contact the Station Superintendent and the Shift Technical Advisor, inform them of the situation.
  - 1.4 Fill out Appendix EP 104-1 Standard Prompt Notification Message and give it to the Communicator (PO or higher classification) and Direct the Communicator to commence notification of the appropriate parties as specified in Section 2.1 of this procedure. The Communicator shall man the NRC RED Telephone on a continuous basis, if required by A-31. If Communicator is required for urgent plant operations

related to the emergency, the concurrence for securing the phone should be obtained from NRC prior to securing this telephone.

- 1.5 If not already accomplished at the ALERT stage, direct the shift clerk to activate the 60 minute call list using EP 209 APP P. If shift clerk is not available, this function may be assigned to any available individual.
  - 1.6 Direct one of the on-shift I&C technicians to activate the Technical Support Center and Emergency Operations Facility in accordance with EP 201 and 203 if not already activated. If not already performed previously, inform the shift clerk which I&C Technician will activate the centers at Unit 1 in order to let the clerk know which remaining I&C Technician to call for the prompt mobilization procedure.
  - 1.7 Direct the Dose Assessment Team Leader to initiate off site radiation surveys, as necessary, if not already done in accordance with EP 205B, Radiation Survey Groups.
  - 1.8 Direct the Personnel Safety Team Leader to initiate on-site radiation surveys as necessary, if not already done in accordance with EP-205B Radiation Survey Groups.
  - 1.9 Assign an Operations Support Center coordinator (Senior PO or APO available) if not already done and direct available shift personnel to report to this Operations Support Center and to activate it in accordance with EP 202 if habitable. If this Operations Support Center is not habitable, direct shift personnel to report to the Control Room.
  - 1.10 Closely monitor conditions to determine present hazards to personnel and potential accident conditions that may develop.
  - 1.11 If release has occurred, dispatch a plant survey team member to obtain a site boundary dose rate as soon as practicable.
  - 1.12 If necessary, initiate implementation of EP-317 and EP-316, Direct Recommendations to County Emergency Management Agencies, and Cumulative Population Dose Calculations.
  - 1.13 Declare a site evacuation in accordance with EP-305 "Site Evacuation" if not already initiated.
- 2.0 Communicator shall:
- 2.1 Perform notifications on Appendix 104-1 using the Standard Prompt Notification Message included. See EP-209 Appendix A for additional telephone numbers, if required.
  - 2.2 Report to the Emergency Director when the notifications

are completed.

- 2.3 Man the RED NRC telephone if required by A-31 until situation stabilizes and RED telephone communications may be secured.

3.0 Operations Support Center Coordinator or his designee shall:

- 3.1 Activate the Operations Support Center on 135' elev turb bldg, if it is habitable, in accordance with EP 202. If this Operations Support Center is NOT habitable report to the Control Room.

4.0 Dose Assessment Team Leader shall:

- 4.1 Initiate off site radiation surveys in accordance with EP 205B, Radiation Survey Groups, when directed by the Emergency Director.

5.0 Personnel Safety Team Leader shall:

- 5.1 Initiate on-site radiation surveys in accordance with EP-205B Radiation Survey Groups when directed by the Emergency Director.

6.0 Shift I&C Technician shall:

- 6.1 Activate the TSC and EOF (if not already activated during ALERT stage) in accordance with EP 201 using Appendix EP-201-2 and procedure EP-203.

7.0 Shift Clerk shall:

- 7.1 If not already implemented during ALERT stage, contact individuals on EP 209 APP P to call in those individuals to man TSC and EOF (60 minute call list). Document contacts on EP 209 APP P.
- 7.2 Inform Interim Emergency Director or Emergency Director when contacts are completed.

FOLLOW-UP ACTIONS

1.0 Emergency Director shall:

- 1.1 Periodically evaluate the event classification in accordance with EP 101, Classification of Emergencies and escalate or deescalate the classification, as necessary.
- 1.2 Obtain results of the Cumulative Population Dose Calculations and offsite radiation surveys from the Radiation Protection Team Leader. Obtain Onsite and Plant Radiation Surveys from the Personnel Safety Team Leader, as necessary.



- 1.3 Provide appropriate information from the previous evaluations to Communicator in the EOF for notification of the Bureau of Radiation Protection.
- 1.4 Perform actions as necessary to mitigate conditions of the emergency situation.
- 1.5 Determine which additional support personnel are necessary for emergency functions and direct the shift clerk or other assigned communicator to contact those personnel.
- 1.6 Provide site personnel with P.A. speaker announcements for any major changes in plant emergency status, such as changing emergency action levels and evacuations.
- 1.7 Direct the Evacuation of affected areas as necessary. Refer to the following procedure:

- GP 15 Local Evacuation
- EP 303 Partial Plant Evacuation
- EP 306 Evacuation of the Information Center

2.0 Station Superintendent shall:

- 2.1 Report to the Technical Support Center or Control Room, for a briefing of the situation.
- 2.2 Assume the role of Emergency Director (if not already done) by formally relieving the interim Emergency Director of this responsibility. Announce that he has assumed the role of Emergency Director to the assembled Technical Support Center personnel.
- 2.3 Verify the emergency classification.
- 2.4 Verify that the Technical Support Center, Emergency Operations Facility and the Operations Support Center have been activated.

3.0 Operations Support Center Coordinator shall:

- 3.1 Notify the Interim Emergency Director or Emergency Director when the Operations Support Center is activated.
- 3.2 Support the Control Room and Shift Supervision as necessary.

4.0 Dose Assessment Team Leader shall:

- 4.1 Notify the Emergency Director when the Emergency Operations Facility is manned.
- 4.2 Report progress and results of Cumulative Population Dose Calculations and off site radiation surveys

to the Site Emergency Coordinator and Emergency Director as necessary.

- 4.3 Notify the Site Emergency Coordinator of the need for assistance from Radiation Management Corporation.

5.0 Shift Clerk or other assigned person shall:

- 5.1 If not already done, notify additional support personnel to report to the plant as directed by the Emergency Director. Refer to EP 209. Document on APP EP 104-2
- 5.2 Notify Emergency Director or Site Emergency Coordinator when the additional support personnel have been notified.

6.0 I&C Technicians shall: (if not already performed as per EP-103)

- 6.1 Inform the Emergency Director when the centers are activated, if not previously done.
- 6.2 Man the TSC or ECF data display (CCTV) positions as directed by the Emergency Director.

7.0 Personnel Safety Team Leader shall:

- 7.1 Report progress and results of onsite and plant surveys to the Emergency Director as necessary.

APPENDIX 104-1  
SITE EMERGENCY NOTIFICATION CHECKOFF LIST

Message: This (is) (is not) a drill. This (is) (is not) a drill. This is Peach Bottom Atomic Power Station calling to report a site emergency has been declared on Unit \_\_\_\_\_. Time and date of site emergency classification is \_\_\_\_\_.

The basic problem is \_\_\_\_\_

The plant status is (stable) (improving) (degrading) (not known).

There (has not been) (is potential for) (has been) (is presently) a radioactive (airborne) (liquid) release from the plant (at a level below that considered a public hazard) (at a level at which protective action is advisable). Recommended protective actions are (none) \_\_\_\_\_.





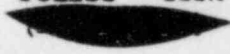

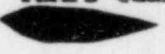
The affected population area is (none) \_\_\_\_\_.

My name is \_\_\_\_\_. This (is) (is not) a drill.

This (is) (is not) a drill.

| Party  | Person Responding | Time of Notification | Communicator's Initials |
|--|-------------------|----------------------|-------------------------|
| Station Superintendent   | _____             | _____                | _____                   |
| Load Dispatcher  | _____             | _____                | _____                   |
| (Tell him to initiate call list "C")                               |                   |                      |                         |
| Pennsylvania Emergency Management Agency*<br>(Blue phone or _____) | _____             | _____                | _____                   |
| Maryland Civil Defense Agency<br>(Blue phone or _____)             | _____             | _____                | _____                   |
| York County Emergency Management Agency<br>(Blue phone or _____)   | _____             | _____                | _____                   |

APPENDIX 104-1 (Cont'd)  
SITE EMERGENCY NOTIFICATION CHECKOFF LIST

|  |       |       |       |
|--|-------|-------|-------|
| Lancaster County<br>Emergency Management Agency<br>(Blue phone or  _____) | _____ | _____ | _____ |
| Chester County Emergency Management Agency<br>(Blue phone or  _____)      | _____ | _____ | _____ |
| Harford County Civil Defense Agency<br>(Blue phone or  _____)             | _____ | _____ | _____ |
| Cecil County Civil Defense Agency<br>(Blue phone or  _____)               | _____ | _____ | _____ |
| Pennsylvania State Police - York<br> _____                               | _____ | _____ | _____ |
| PA. BRP<br>(White Phone or  _____)                                      | _____ | _____ | _____ |
| NRC Operations Center**<br>(Red Phone) _____   | _____ | _____ | _____ |
| PEAPS Guard Sergeant<br> _____  | _____ | _____ | _____ |

Time notification of parties above completed. \_\_\_\_\_

Verified by \_\_\_\_\_ Date \_\_\_\_\_  
Emergency Director

File Sys-3-1

\* Must notify PEMA by use of commercial telephone no. on backshifts.  
(Blue phone not manned by PEMA on backshifts).

\*\* If NRC previously notified during ALERT condition, the assigned PO communicator continuously manning red phone in control room should handle this notification automatically. However, check with Control Room to be sure. This notification is made.





APPENDIX EP 104-3  
EMERGENCY EXPOSURE LIMITS

| <u>Function</u>   | <u>Projected<br/>Whole Body<br/>Dose</u> | <u>Thyroid<br/>Dose</u>       | <u>Authorized<br/>By</u> |
|---|--|-------------------------------|--------------------------|
| 1. Life Saving and<br>Reduction of<br>Injury                | 75 rem*                                  | 375 rem                       | Emergency**<br>Director  |
| 2. Operation of<br>Equipment to<br>Mitigate an<br>Emergency | 25 rem*                                  | 125 rem                       | Emergency**<br>Director  |
| 3. Protection of<br>Health and Safety<br>of the Public      | 5 rem                                    | 25 rem                        | Emergency<br>Director    |
| 4. Other Emergency<br>Activities                            | 10 CFR 20<br>limits                      | 10 CFR 20<br>limits           | Emergency<br>Director    |
| 5. Re-Entry/Re-<br>covery<br>Activities                     | Administrative<br>Guide Lines            | Administrative<br>Guide Lines | N/A                      |

\* Reference: EPA-520/1-75-001 Table 2.1

\*\*Such exposure shall be on a voluntary basis

APPENDIX EP-104-4  
SITE EMERGENCY DEESCALATION NOTIFICATION CHECK-OFF LIST

MESSAGE: This (is) (is not) a drill. This (is) (is not) a drill.

This is Peach Bottom Atomic Power Station calling to report a change in emergency action level. The site emergency has been deescalated to an (Unusual Event) (Alert). Time and date is \_\_\_\_\_. The basic problem is \_\_\_\_\_.

The plant status is (stable) (improving) (degrading) (not known). There (has been) (has not been) an (airborne) (liquid) radioactive release from the plant. Protective actions recommended are (none) \_\_\_\_\_

. The affected population area is (none) \_\_\_\_\_


. My name is \_\_\_\_\_. This (is)


(is not) a drill.


Notifications:


| <u>Party</u>  | <u>Person Responding</u> | <u>Time of Notification</u> | <u>Communicator's Initials</u> |
|---|--------------------------|-----------------------------|--------------------------------|
| Station Superintendent  | _____                    | _____                       | _____                          |
| Load Dispatcher<br>(Tell him to initiate call list "C")               | _____                    | _____                       | _____                          |
| Pennsylvania Emergency Management Agency*<br>(Blue phone or _____)    | _____                    | _____                       | _____                          |
| Maryland Civil Defense Agency<br>(Blue phone or _____)                | _____                    | _____                       | _____                          |
| York County Emergency Management Agency<br>(Blue phone or _____)      | _____                    | _____                       | _____                          |
| Lancaster County Emergency Management Agency<br>(Blue phone or _____) | _____                    | _____                       | _____                          |


APPENDIX EP 104-4 (Cont'd)  
SITE EMERGENCY DEESCALATION NOTIFICATION CHECKOFF LIST

Chester County Emergency Management Agency  
(Blue phone or  \_\_\_\_\_)


Harford County Civil Defense Agency  
(Blue phone or  \_\_\_\_\_)

Cecil County Civil Defense Agency  
(Blue phone or  \_\_\_\_\_)

Pennsylvania State Police - York  
 \_\_\_\_\_

PA BRP  
(White Phone or  \_\_\_\_\_)

NRC Operations Center\*\*  
(Red Phone) \_\_\_\_\_

PBAPS Guard Sergeant  
 \_\_\_\_\_

Time notification of parties above completed. \_\_\_\_\_

Verified by \_\_\_\_\_ Date \_\_\_\_\_  
Emergency Director

File Sys-3-1

\* Must notify PEMA by use of commercial telephone no. on backshifts.  
(Blue phone not manned by PEMA on backshifts).

CONTROLLED APPROVED COPY-  
VOID PREVIOUS ISSUE  
DISTRIBUTION PER A-2  
PHILADELPHIA ELECTRIC COMPANY

*RSK*  
9-21-84

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-105 GENERAL EMERGENCY RESPONSE

PURPOSE

To define the site response to a General Emergency.

REFERENCES

1. Peach Bottom Atomic Power Station Emergency Plan
2. NUREG 0654
3. EP-101 Classification of Emergencies

APPENDICES

- EP 105-1 General Emergency Checkoff List
- EP 105-2 Personnel Call Record
- EP 105-3 Emergency Exposure Limits (Emergency Plan Table 6.1)
- EP 105-4 General Emergency Deescalation Notification Checkoff List

PRECAUTIONS

1. Planned radiation exposures should be limited to the administrative guide levels in Appendix EP 105-4 Emergency Exposure Limits.

IMMEDIATE ACTIONS

- 1.0 Shift Supervision shall:
  - 1.1 Assume the role of Interim Emergency Director.
  - 1.2 Activate Emergency Teams as necessary if not already accomplished at an earlier emergency action level.
  - 1.3 Contact the Station Superintendent and the Shift Technical Advisor, inform them of the situation.
  - 1.4 Fill out Appendix EP 105-1 Standard Prompt Notification Form and give it to the Communicator (PO or higher classification)
  - 1.5 Direct Communicator to commence notification of the appropriate parties as specified in Section 2.1 of this

procedure. The Communicator shall man the NRC RED Telephone on a continuous basis if required by A-31. If communicator is required for urgent plant operations related to the emergency, the concurrence for securing the phone should be obtained from the NRC prior to securing this telephone.

- 1.6 If not already accomplished at the ALERT or SITE EMERGENCY stage, direct the shift clerk to activate the 60 minute call list using EP 209 APP P. If shift clerk is not available, this function may be assigned to any available individual.
  - 1.7 Direct one of the on-shift I&C Technicians to activate the Technical Support Center and the Emergency Operations Facility in accordance with EP 201 and 203 if not already activated.
  - 1.8 Direct the Dose Assessment Team Leader to initiate offsite radiation surveys, as necessary, in accordance with EP 205B, Radiation Survey Groups, if not already done.
  - 1.9 Direct the Personnel Safety Team Leader to initiate on-site radiation surveys as necessary, in accordance with EP-205B, Radiation Survey Groups, if not already done.
  - 1.10 Assign an Operations Support Center Coordinator (Sr PO or APO available) if not already done and direct available shift personnel to report to the Operations Support Center and to activate it in accordance with EP-202, If habitable. If the Operations Support Center is NOT habitable, direct shift personnel to report to the control room.
  - 1.11 Closely monitor conditions to determine present hazards to personnel and potential accident conditions that may develop.
  - 1.12 If release has occurred, dispatch a plant survey team member to obtain a site boundary dose rate as soon as practicable.
  - 1.13 If necessary, initiate implementation of EP-317 and EP-316, Direct Recommendations to County Emergency Management Agencies, and Cumulative Population Dose Calculations.
  - 1.14 Declare a site evacuation in accordance with EP-305 "Site Evacuation" if not already initiated.
- 2.0 Communicator shall:
- 2.1 Perform notifications on Appendix EP 105-1 using the Standard Prompt Notification Message included. See EP 209, Appendix A, for telephone numbers.
  - 2.2 Report to the Emergency Director when the notifications are completed.
  - 2.3 Man the RED NRC telephone if required by A-31 until situation stabilizes and RED telephone communications



may be secured.

3.0 Operations Support Center Coordinator or his designee shall:

- 3.1 Activate the Operations Support Center, if it is habitable, in accordance with EP 202. If the Operations Support Center is NOT habitable report to the Control Room.

4.0 Dose Assessment Team Leader shall:

- 4.1 Initiate off site radiation surveys in accordance with EP-205B, Radiation Survey Groups when directed by the Emergency Director.

5.0 Personnel Safety Team Leader shall:

- 5.1 Initiate on-site radiation surveys in accordance with EP-205B, Radiation Survey Groups when directed by the Emergor.

6.0 Shift I&C Technician shall:

- 6.1 Activate the TSC and EOF (if not already activated during ALERT or SITE EMERGENCY stage) in accordance with EP 201 and EP 203.

7.0 Shift Clerk shall:

- 7.1 If not already implemented during ALERT or SITE EMERGENCY stage, contact individuals on EP 209 APP P to call in those individuals to man the TSC and EOF (60 minute call list). Document contacts on EP 209 APP P.
- 7.2 Inform Interim Emergency Director or Emergency Director when contacts are completed.

FOLLOW-UP ACTIONS

1.0 Emergency Director shall:

- 1.1 Periodically evaluate the event classification in accordance with EP 101, Classification of Emergencies. If the conditions change, deescalate to an appropriate classification.
- 1.2 Obtain results of the Cumulative Population Dose Calculations offsite radiation surveys from the Dose Assessment Team Leader. Obtain onsite radiation surveys from the Personnel Safety Team Leader.
- 1.3 Referring to EP-317, provide appropriate information from the previous evaluations and Protective Action recommendations to a Communicator in the EOF for notification of the Bureau of Radiation Protection.

- 1.4 Perform actions as necessary to mitigate conditions of the emergency situation.
- 1.5 If not already performed, determine which additional support personnel are necessary for emergency functions and direct the shift clerk or other assigned person to contact those personnel.
- 1.6 Provide site personnel with PA speaker announcements for any major changes in plant emergency status, such as changing emergency action levels.
- 1.7 Direct the evacuation of affected areas, as necessary. Refer to the following procedures:
  - GP 15 Local Evacuation
  - EP 303 Partial Plant Evacuation
  - EP 306 Evacuation of the Information Center

2.0 Station Superintendent shall:

- 2.1 Report to the Technical Support Center or Control Room, for a briefing of the situation.
- 2.2 Assume the role of Emergency Director (if not already done) by formally relieving the Interim Emergency Director. Announce that he has assumed the role of Emergency Director to the assembled Technical Support Center personnel.
- 2.3 Verify the emergency classification.
- 2.4 Verify that the Technical Support Center, Emergency Operations Facility and the Operations Support Center have been activated.

3.0 Operations Support Center Coordinator shall:

- 3.1 Notify the Interim Emergency Director when the Operations Support Center is activated.
- 3.2 Support the Control Room and Shift Supervision as necessary.

4.0 Dose Assessment Team Leader shall:

- 4.1 Notify the Emergency Director when the Emergency Operations Facility is activated.
- 4.2 Report progress and results of Cumulative Population Dose Calculations and off site radiation surveys to the Emergency Director, as necessary.

4.3 Notify the Site Emergency Coordinator of the need for assistance from Radiation Management Corporation.

5.0 Shift Clerk or other assigned person shall:

5.1 When requested, notify additional support personnel to report to the plant as directed by the Emergency Director. Refer to EP-209.

5.2 Notify Emergency Director or Site Emergency Coordinator when additional support personnel have been notified. Document on APP EP-105-2.

6.0 I&C Technicians shall: (if not already performed as per EP-103 or EP-104)

6.1 Inform the Emergency Director when centers are activated.

6.2 Man the TSC and EOF data display (OCTV) positions as directed by the Emergency Director.

7.0 Personnel Safety Team Leader shall:

7.1 Report progress and results of on-site and plant surveys to the Emergency Director as necessary.


APPENDIX EP 105-1  
GENERAL EMERGENCY NOTIFICATION CHECKOFF LIST


Message: This (is) (is not) a drill. This (is) (is not) a  
drill. This is Peach Bottom Atomic Power Station calling to report  
a General Emergency has been declared on Unit No. \_\_\_\_\_. Time  
and date of General Emergency classification is \_\_\_\_\_. The  
basic problem is \_\_\_\_\_.  
The plant status is (stable) (improving) (degrading) (not known).  
There (is presently) (has not been) (is potential for) (has been)  
a radioactive (airborne) (liquid) release from the plant (at a level  
below that considered a public hazard) (at a level at which protective  
action is advisable). Recommended protective actions are (none)  
\_\_\_\_\_. The affected population  
area is (none) \_\_\_\_\_. My  
name is \_\_\_\_\_. This (is) (is not) a  
drill. This (is) (is not) a drill.

Notifications:


| <u>Party</u>  | <u>Person</u><br><u>Responding</u> | <u>Time of</u><br><u>Notification</u> | <u>Communicator's</u><br><u>Initials</u> |
|---|------------------------------------|---------------------------------------|--|
| Station Superintendent  | _____                              | _____                                 | _____                                    |
| Lead Dispatcher<br>(Tell him to initiate<br>call list "C")            | _____                              | _____                                 | _____                                    |
| Pennsylvania Emergency<br>Management Agency*<br>(Blue phone or _____) | _____                              | _____                                 | _____                                    |
| Maryland Civil Defense<br>Agency<br>(Blue phone or _____)             | _____                              | _____                                 | _____                                    |
| York County Emergency<br>Management Agency<br>(Blue phone or _____)   | _____                              | _____                                 | _____                                    |


APPENDIX EP 105-1 (Cont'd)  
GENERAL EMERGENCY NOTIFICATION CHECKOFF LIST


Lancaster County  
Emergency Management  
Agency  
(Blue phone or  \_\_\_\_\_

Chester County  
Emergency Management  
Agency  
(Blue phone or  \_\_\_\_\_

Harford County Civil  
Defense Agency  
(Blue phone or  \_\_\_\_\_

Cecil County Civil  
Defense Agency  
(Blue phone or  \_\_\_\_\_

Pennsylvania State  
Police - York  
 \_\_\_\_\_

PA BRP  
(White Phone or  \_\_\_\_\_

NRC Operations Center\*\*  
(Red Phone) \_\_\_\_\_

PAAPS Guard  
Sergeant  \_\_\_\_\_

Time notification of parties above completed \_\_\_\_\_.

Verified By \_\_\_\_\_ Date \_\_\_\_\_  
Emergency Director

File - Sys-3-1

\* Must notify PEMA by use of commercial telephone no. on backshifts.  
(Blue phone not manned by PEMA on backshifts.)

\*\* If NRC previously notified during Alert or Site Emergency condition, the assigned PO communicator continuously manning the red phone in Control Room should handle this notification automatically. However, check with Control Room to be sure this notification is made.





APPENDIX EP 105-3  
EMERGENCY EXPOSURE LIMITS

| <u>Function</u>  | <u>Projected<br/>Whole Body<br/>Dose</u> | <u>Thyroid<br/>Dose</u>      | <u>Authorized<br/>By</u> |
|--|--|------------------------------|--------------------------|
| 1. Life Saving and<br>Reduction of Injury                | 75 rem*                                  | 375 rem                      | Emergency**<br>Director  |
| 2. Operation of Equipment<br>to Mitigate an<br>Emergency | 25 rem*                                  | 125 rem                      | Emergency**<br>Director  |
| 3. Protection of Health<br>and Safety of the<br>Public   | 5 rem                                    | 25 rem                       | Emergency<br>Director    |
| 4. Other Emergency<br>Activities                         | 10 CFR 20<br>limits                      | 10 CFR 20<br>limits          | Emergency<br>Director    |
| 5. Re-Entry/Recovery<br>Activities                       | Administrative<br>Guidelines             | Administrative<br>Guidelines | N/A                      |

\*Reference: EPA-520/1-75-001 Table 2.1

\*\*Such exposure shall be on a voluntary basis

APPENDIX EP-105-4  
GENERAL EMERGENCY DEESCALATION NOTIFICATION CHECK-OFF LIST

Message: This (is) (is not) a drill. This (is) (is not) a drill.

This is Peach Bottom Atomic Power Station calling to report a change in emergency action level. The General Emergency has been deescalated to an (Unusual Event) (Alert) (Site Emergency). Time and date is \_\_\_\_\_.

The basic problem is \_\_\_\_\_.

The plant status is (stable) (improving) (degrading) (not known).

There (has been) (has not been) an (airborne) (liquid) radioactive release from the plant. Protective actions recommended are (none) \_\_\_\_\_







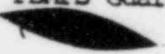
. The affected population area is (none) \_\_\_\_\_

\_\_\_\_\_. My name is \_\_\_\_\_. This (is) (is not) a drill.

Notifications:

| <u>Party</u>   | <u>Person Responding</u> | <u>Time of Notification</u> | <u>Communicator's Initials</u> |
|--|--------------------------|-----------------------------|--------------------------------|
| Station Superintendent   | _____                    | _____                       | _____                          |
| Load Dispatcher  | _____                    | _____                       | _____                          |
| (Tell him to initiate call list "C")                               |                          |                             |                                |
| Pennsylvania Emergency Management Agency*<br>(Blue phone or _____) | _____                    | _____                       | _____                          |
| Maryland Civil Defense Agency<br>(Blue phone or _____)             | _____                    | _____                       | _____                          |
| York County Emergency Management Agency<br>(Blue phone or _____)   | _____                    | _____                       | _____                          |

APPENDIX EP-105-4 (Cont'd)  
GENERAL EMERGENCY DEESCALATION NOTIFICATION CHECK-OFF LIST

|   |   |       |       |       |
|---|---|-------|-------|-------|
| Lancaster County<br>Emergency Management Agency<br>(Blue phone or |    | _____ | _____ | _____ |
| Chester County Emergency Management Agency<br>(Blue phone or      |    | _____ | _____ | _____ |
| Harford County Civil Defense Agency<br>(Blue phone or             |    | _____ | _____ | _____ |
| Cecil County Civil Defense Agency<br>(Blue phone or               |    | _____ | _____ | _____ |
| Pennsylvania State Police - York                                  |   | _____ | _____ | _____ |
| PA. BRP<br>(White Phone or  |  | _____ | _____ | _____ |
| NRC Operations Center**<br>(Red Phone)                            |   | _____ | _____ | _____ |
| PBAPS Guard Sergeant  |  | _____ | _____ | _____ |

Time notification of parties above completed. \_\_\_\_\_

Verified by \_\_\_\_\_ Date \_\_\_\_\_  
Emergency Director

File Sys-3-1

\* Must notify PEMA by use of commercial telephone no. on backshifts.  
(Blue phone not manned by PEMA on backshifts).

CONTROLLED APPROVED COPY,  
VOID PREVIOUS ISSUE  
DISTRIBUTION PER A-2

*[Handwritten signature]*  
9-18-84

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-205A CHEMISTRY SAMPLING AND ANALYSIS TEAM

PURPOSE:

To define the actions of the Chemistry Sampling and Analysis Team.

REFERENCES:

1. Peach Bottom Atomic Power Station Emergency Plan

| <u>Section</u> | <u>Title</u>  |
|----------------|---|
| 5.2.2.2.1.e    | Chemistry Sampling and Analysis   |
| 6.2.1          | Assessment Methods for Determining Magnitude of Release to the Atmosphere |

2. Health Physics Operating/Chemistry Operating procedures

| <u>Number</u> | <u>Title</u>           |
|---------------|------------------------|
| HPO/CO-4      | Radiation Work Permits |

3. NUREG 0654 Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.

APPENDIX:

|           |   |
|-----------|---|
| EP 205A-1 | Emergency Exposure Limits (Emergency Plan Table 6.1)  |
| EP-205A-2 | Offsite Post Accident Sampling Analysis C.O.L. for Babcock & Wilcox Lurchburg Research Center |
| EP-205A-3 | Chem. Sampling and Analysis C.O.L.  |

ACTION LEVEL:

The Chemistry Sampling and Analysis Team will be activated at the discretion of the Emergency Director.

PRECAUTIONS:

1. In all steps of this procedure, an ALARA concept is mandatory. Sampling and Analysis Group member's exposure should be limited to the administrative guide levels in Appendix EP 205A-1, Emergency Exposure Limits. Chemistry Sampling and Analysis Group members should control their own exposures.
2. Requirements of HPO/CO-4, Radiation Work Permits, are not applicable.

IMMEDIATE ACTIONS:

- 1.0 Chemistry Sampling and Analysis Team Leader shall:
  - 1.1 Contact the Chemistry Sampling and Analysis Group Leader, direct him to collect samples, as necessary, and analyze the samples in accordance with HPO/CO Procedures; or use offsite support groups for the analyses.
- 2.0 Chemistry Sampling and Analysis Group Leader shall:
  - 2.1 Assemble the Chemistry Sampling and Analysis Group.
  - 2.2 Direct the monitoring and sampling of release points, air monitors, and process monitors as required and in accordance with precaution 1, above.
  - 2.3 Analyze the data from samples, process instrument readings, and effluent instrument readings. From this data determine isotopic composition and release rates.
  - 2.4 Provide the Dose Assessment Group with pertinent information and direct group members to assist, as necessary, with dose rate calculations and determination of radiological consequences.
- 3.0 Chemistry Sampling and Analysis Group members shall:
  - 3.1 Assemble the necessary equipment needed to obtain and analyze samples. Prelabel all sample containers before sampling. Use Appendix EP 205A-2 to insure all steps in the HPO/CO sampling and analysis procedures are followed.
  - 3.2 Sample primary coolant and drywell atmosphere as necessary with the following procedures:
    - EP 205A.1 Operation of Post Accident Sampling Station
    - EP 205A.2 Obtaining Drywell Gas Samples from Containment Atmosphere Dilution Cabinets
    - EP 205A.3 Retrieving and Changing Sample Filters and Cartridges from the Drywell Radiation Monitor



EP 205A.4 Obtaining Drywell Gas Samples from the Drywell Radiation Monitor Sampling Station

EP 205A.5 Obtaining Reactor Water Samples from Sample Sinks Following Accident Conditions

3.3 In the event of a large radioactive liquid spill, obtain samples of the river water in accordance with:

EP 205A.6 Obtaining Canal Discharge Water Samples Following Radioactive Liquid Releases Following Accident Conditions.

3.4 Use the following procedures to obtain samples from the various sample points.

#### Main Stack & Roof Vents

EP 205A.7 Obtaining the Iodine and Particulate Samples from the Main Stack and Roof Vents Following Accident Conditions

#### Liquid Radwaste

EP 205A.8 Obtaining Liquid Radwaste Samples from the Radwaste Sample Sink Following Accident Conditions

#### Condensate

EP 205A.9 Obtaining Samples from Condensate Sample Sink Following Accident Conditions

#### Off Gas

EP 205A.10 Obtaining Off-Gas Samples from the Off-Gas Hydrogen Analyzer Following Accident Conditions

#### Rx Building or Torus Atmosphere

EP 205A.1 Operation of Post Accident Sampling Station

3.5 Use the following procedures for the preparation and analysis of highly radioactive samples.

EP 205A.11 Sample Preparation and Chemical Analysis of Highly Radioactive Liquid Samples

EP 205A.12 Sample Preparation and Analysis for Highly Radioactive Particulate Filters and Iodine Cartridges

EP 205A.13 Sample Preparation and Analysis of Highly Radioactive Gas Samples

- 3.6 Attach all data sheets and analysis reports to Appendix EP 205A-2 (Chem Sampling & Analysis C.O.L.) for each sample taken. Give this information to the Chem Sampling and Analysis Group Leader.

FOLLOW-UP ACTIONS:

- 1.0 Chemistry Sampling and Analysis Team Leader shall:
- 1.1 Report the results of these analyses to the Site Emergency Coordinator (if activated), the Emergency Director, Dose Assessment Team Leader.
  - 1.2 Provide group members with periodic plant status changes including significant radiation exposure and radioactive contamination problems which may affect the functions of the team.
  - 1.3 If necessary, utilize the post accident sampling analysis capabilities of Babcock and Wilcox by referring to Appendix EP 205A-2 for proper notifications and EP 205A-3 for background information.
- 2.0 Chemistry Sampling and Analysis Group Leader shall:
- 2.1 Report results of samples and analyses to the Chemistry Sampling and Analysis Team Leader.

APPENDIX EP 205A-1

EMERGENCY EXPOSURE LIMITS

| <u>Function</u>  | <u>Projected<br/>Whole Body<br/>Dose</u> | <u>Thyroid<br/>Dose</u>      | <u>Authorized<br/>By</u> |
|--|--|------------------------------|--------------------------|
| 1. Life Saving and<br>Reduction of Injury                | 75 rem*                                  | 375 rem                      | Emergency**<br>Director  |
| 2. Operation of Equipment<br>to Mitigate an<br>Emergency | 25 rem*                                  | 125 rem                      | Emergency**<br>Director  |
| 3. Protection of Health<br>and Safety of the<br>Public   | 5 rem                                    | 125 rem                      | Emergency**<br>Director  |
| 4. Other Emergency<br>Activities                         | 10 CFR 20                                | 10 CFR 20                    | Emergency<br>Director    |
| 5. Re-Entry/Recovery<br>Activities                       | Administrative<br>Guidelines             | Administrative<br>Guidelines | N/A                      |

\*Reference: EPA-520/1-75-001 Table 2.1

\*\*Such exposure shall be on a voluntary basis

APPENDIX EP 205A-2

OFFSITE POST ACCIDENT SAMPLING ANALYSIS CHECK-OFF LIST

FOR BABCOCK AND WILCOX LYNCHBURG RESEARCH CENTER

Message:

This is \_\_\_\_\_ (NAME) representing the Radiation Protection Team of Peach Bottom Atomic Power Station. This is a request to provide post accident sample analysis at the Lynchburg Research Center. All inquiries should be directed to \_\_\_\_\_ (NAME) at the following phone number \_\_\_\_\_. The following information is known concerning the samples:

Unit \_\_\_\_\_  
Number of samples \_\_\_\_\_  
Estimated shipping time \_\_\_\_\_  
Method of transportation (air or land) \_\_\_\_\_  
Name of carrier \_\_\_\_\_

---

| Sample | 1 | 2 | 3 | 4 |
|--------|---|---|---|---|
|--------|---|---|---|---|

---

Type (liquid, gaseous, cartridge)

Measured Radiation Levels

- surface
- 3 feet

---

Remarks:

Notifications:

Emergency Control Officer

J. P. Doran

Alternate Emergency Control Officer

A. F. Olsen

Work

Home



APPENDIX EP 205A-3

CHEM SAMPLING & ANALYSIS C.O.L.

Sample \_\_\_\_\_  
Time \_\_\_\_\_  
Date \_\_\_\_\_

Sampling:

Sample Container Prelabeled \_\_\_\_\_  
Lead Carrying Pig Obtained \_\_\_\_\_  
Sampling Equipment Assembled \_\_\_\_\_  
Procedure Reviewed \_\_\_\_\_  
RWP Issued or HP Available \_\_\_\_\_  
  
Sample Size \_\_\_\_\_  
Sample Dose Rate (Contact) \_\_\_\_\_

Analysis:

Equipment Assembled \_\_\_\_\_  
Lab Set Up for Analysis \_\_\_\_\_  
to Minimize Exposure \_\_\_\_\_  
Procedure Reviewed \_\_\_\_\_  
Analysis Performed: (Attach Results of Analysis)  
Geli Scan \_\_\_\_\_  
Chloride Analysis \_\_\_\_\_  
Boron Analysis \_\_\_\_\_  
Gas Chromatography \_\_\_\_\_  
Other (Explain) \_\_\_\_\_

Sample Volume Used for Analysis \_\_\_\_\_

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-205A.1 OPERATION OF POST ACCIDENT SAMPLING STATION

PURPOSE

The purpose of this procedure is to provide guidelines for consideration prior to, during and after obtaining samples from the post accident sampling station following accident conditions.

REFERENCES

P&ID M374, M372, M361, M316, M362

EQUIPMENT

Appropriate Health Physics Survey Equipment  
Air Sampler (low volume)  
Respiratory Protective Equipment  
Anti-C Clothing  
Digital Alarming Dosimetry  
Gas Vial Sample Tube  
Iodine & Particulate Sample Assembly  
14.4 Gas Vials and Caps  
Liquid Sample Bottles and Caps  
10cc Syringe with Stoplock  
Silver Zeolite Cartridges  
47mm Particulate Filters  
Small Bottle of Demin Water  
Large Volume Cask  
Small Volume Cask  
Gas Sample Cask  
Flashlight  
Mirror  
Watch with SecondHand  
Plastic Bag & Pole to Transport Cartridges

PRECAUTIONS

- A. In all steps of this procedure, an ALARA concept is mandatory. This procedure provides some philosophy in pre-planning sampling evolutions for samples during an accident. In addition to reviewing this procedure, an ALARA review of the sampling process should be performed prior to obtaining the sample. If the sample is not really needed, and lower dose methods exist to determine the gross data that the sample provides, the sample should not be obtained.



- B. At no time may NRC exposure limits (either airborne or body dose) be exceeded during the surveying for sampling or obtaining the sample. If it appears that an overexposure could reasonably occur when obtaining the sample, do NOT proceed without written NRC approval.

PROCEDURE:

1. It has been determined that a drywell atmosphere, torus atmosphere, reactor building atmosphere or primary coolant sample is needed from the post accident sampling station. Make sure before entry into the M-G set room that all personnel who will handle a sample have extremity (hand) dosimetry in place.
2. Two paths are recommended.
  - A. Entering the normal turbine building 116' plant entrance, up the turbine building stairs to the M-G set room.  
Time = Approximately 3 minutes.
  - B. Entering the roll up doors on the north end for Unit 3 or south end for Unit 2, up the turbine building stairs to the M-G set room.  
Time = Approximately 3 minutes.
3. Have a Health Physics Technician accompany the Chemistry Technician assigned to obtain samples in order to perform area surveys. Brief Health Physics & Chemistry personnel on the route to be taken and the time to get to the sample point.
4. Health Physics personnel shall take appropriate survey equipment and protective equipment (e.g., SCBA gear, anti-C's, etc.). Before making entry to the Power Block, ensure survey equipment is turned on and calibrated.
5. Upon entering the Power Block, the surveyor(s) will note trends in general radiation levels enroute to the sample point. If dose rates exceed 10 R/hr gamma or 10 rad/hr beta prior to arriving at the point specified below and upon further investigation this dose rate remains stable or increases, exit immediately and report to Health Physics Supervision.
6. If the dose rate at any door that has to be opened is greater than 5 R/hr, leave the area immediately and report to Health Physics Supervision with this information. With the dose rates less than 5 R/hr, enter the area but take careful notice of the dose rates.
7. The following are the times required to obtain samples:

|                                  |            |
|----------------------------------|------------|
| Drywell or Torus Atmosphere      | 25 Minutes |
| Secondary Containment Atmosphere | 10 Minutes |
| Primary Coolant Jet Pump         | 20 Minutes |
| RHR                              | 25 Minutes |

Use the appropriate section for the desired sample:

- Section 1      14.4 ml gas sample from drywell, torus or reactor building atmosphere.
- Section 2      Iodine and/or particulate sample from drywell, torus or secondary containment atmosphere.
- Section 3      10cc sample of reactor water and/or dissolved gas sample.
- Section 4      .1cc reactor water sample with 100:1 dilution.

Refer to the appropriate appendix for flushing, schematics and proper valve documentation:

- Appendix A.1    Draining the trap, sump and collector.
- Appendix A.2    Post Accident Sampling Station control switches.
- Appendix A.3    Schematic of Post Accident Sample Station.
- Appendix A.4    Double Verification Sheet for reactor valves.

8. A RWP or HP technician will be assigned for the sample collection and analysis.
9. Prior to the sample entering the hot lab, any shielding, remote tooling or other protective measure shall be in place and ready to accept the sample.
10. Upon introduction of the sample into the hot lab, the sample will be handled in a manner such that it will cause an ALARA whole body dose to personnel involved. Unnecessary personnel shall not remain in the hot lab.
11. Properly in place and shielded, the sample will be processed remotely (where and when possible). Careful handling of the sample is mandatory in preparation for analysis so contamination is not spread, airborne problems are held to a minimum, and a new sample is not required.
12. Following final analysis of the sample, results shall be reported to appropriate supervision.

#### SECTION 1 14.4 ML GAS SAMPLE

##### PREREQUISITES:

1. System lined up in accordance with C.O.L. S.20.1.

- Have shift line up CAD system for desired sample and document the valves that are changed using Appendix A.4 (Bypass SV 8101 (9101) isolation per GP-8A). Document valve line up using Appendix A.4.

| <u>UNIT 2</u>    |         |                 | <u>UNIT 3</u>    |         |                 |
|------------------|---------|-----------------|------------------|---------|-----------------|
| <u>Sample</u>    |         | <u>Position</u> | <u>Sample</u>    |         | <u>Position</u> |
| Torus            | 4960D   | Open            | Torus            | 5960A   | Open            |
|                  | 4961D   | Closed          |                  | 5961A   | Closed          |
|                  | 4966D   | Torus II        |                  | 5966A   | Torus I         |
|                  | 8101    | Open            |                  | 9101    | Open            |
|                  | 4951B   | Open            |                  | 5951B   | Open            |
|                  | 4950B   | Closed          |                  | 5950B   | Closed          |
|                  | AO-8108 | Local           |                  | SV-9108 | Local           |
| Lower<br>Drywell | 4960C   | Open            | Upper<br>Drywell | 5960B   | Open            |
|                  | 4961C   | Closed          |                  | 5961B   | Closed          |
|                  | 4966C   | Drywell II      |                  | 5966B   | Drywell I       |
|                  | 8101    | Open            |                  | 9101    | Open            |
|                  | 4951B   | Open            |                  | 5951B   | Open            |
|                  | 4950B   | Closed          |                  | 5950B   | Closed          |
|                  | AO-8108 | Local           |                  | SV-9108 | Local           |

- No line up needed for secondary containment sample.
- Obtain the key to the control panel power from Shift Supervision or Chemistry Supervision.
- Heat trace is to remain on at all times. To restore the heat trace system after loss of power, press the reset button at 20(30)S359. Proper operating temp. will be indicated by the green lights.

PROCEDURE:

- Drain the system per Appendix A.1.
- With the sump drain system switch in the off position, place switch HC-700 (liquid/gas selector) in the gas position. Open N2 bottle valve and regulate to approximately 80 psig. Make sure the gas chiller E-703 is on. Quickly inspect the needle in the gas port to determine that its condition is satisfactory for obtaining a sample.
- Install the gas filter drawer into position. If a particulate/iodine sample will be obtained later, make sure that the desired filter cartridges are properly installed in the cartridge retainer.
- Turn switch HC-723 (gas sample selector switch) to position 3 if a secondary containment atmosphere sample is desired. If a torus or drywell atmosphere sample is desired, turn to position 1 and open the common gas line isolation valve.

| <u>Unit 2</u> | <u>Unit 3</u> |
|---------------|---------------|
| AO8108        | SV9108        |

5. Place a standard 14.4 milliliter off gas vial into the gas vial positioner, slide the positioner into the gas port. Observe that the bottle status light changes from red to green.
6. Turn the 10 ML gas sample switch HC-705 to position 2 and circulate gas for a period long enough to assure that the sample lines are flushed out with gas being sampled. The minimum time required is 5 minutes.

Be sure that the flow as read by the rotameter thru the sample enclosure window is in the expected range of 25 to 35 SCFH. Record flow and flush duration on data sheet.

7. Turn HC-705 to position 3 and evacuate the off gas vial. Record pressure of the evacuated vial PI-708 on the data sheet. Make sure the vacuum in the gas vial reaches a stable minimum reading.
8. Turn HC-705 to position 4, "Take sample". Make sure that PI-708 does not change. (If PI-708 changes rapidly then the sample bottle vacuum is leaking. Turn HC-705 to position 2 counter clockwise. Replace the old bottle with a new one and go back to step 5.)
9. Press the HC-720 button to obtain the sample. Keep button depressed until a steady pressure is reached. (Approximately 5 seconds.) Record pressure from PI-708 on data sheet. This pressure should correspond to actual pressure of sample being obtained. Record sample temperature TI-724 on data sheet.
10. Turn HC-705 to position 5 "flush system" and flush for approximately 1 minute.
11. Turn HC-705 to position 6, 7, and 8 then straight up to off.
12. Turn the gas line isolation valve (AO-8108 for Unit 2 or SV-9108 for Unit 3) to its closed position and HC-700 to off. (Document on Appendix A.4).
13. Wearing cotton liners and gloves, and (observing ALARA practices) remove gas vial keeping it a maximum distance from the individual. If the sample is greater than 100 mR/hr use the gas vial cask for transporting the sample.
14. Take the sample to the appropriate lab for further dilution and counting. File data sheet in Chem. Lab binder.
15. Calculate sample volume at the sample pressure as recorded in Step 8.

$$V_s = \frac{(14.7)(14.4)}{(530)} \frac{(T_F + 460)}{(P \text{ PSIA})}$$

16. Perform the drain of trap, sump and collector per Appendix A.1. Close N2 bottle valve. Close FV-627 by setting PCV-627 to 0 psig.
17. If this is the last sample required, turn all switches to the upright and "off" position (except for HC-723 which is left in position 3) before turning "off" power. Return key to Shift Supervision or Chemistry Supervision.
18. Document that the valves that were lined up for sampling have been returned to normal using Appendix A.4.
19. Return completed Appendix A.4 to Shift Supervision for review at the completion of sampling. File in complete EP-205A.1 file.



EP-205A.1 Post Accident Sampling Station

Data Sheet for 14.4 ML Gas Sample

1. Sample Source \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_
2. Sample Flow \_\_\_\_\_ FI-725 (scfh)
3. Flush Duration \_\_\_\_\_ (Min.)
4. Absolute Pressure of Vial \_\_\_\_\_ PI-708
5. Final Sample Pressure \_\_\_\_\_ PI-708
6. Sample Temperature \_\_\_\_\_ TI-724 ( F)
7. Calculated Sample Volume \_\_\_\_\_ (ML)

$$V = \frac{(14.7)(14.4)(T F + 460)}{(530)(P PSIA)}$$

Note: Pressure gauge PI-708 on Unit 2 are in psig while those in Unit 3 are psia.

SECTION 2 IODINE/PARTICULATE SAMPLE

PREREQUISITES:

1. System lined up in accordance with C.O.L. S.20.1.
2. Have shift line up CAD system for desired sample and document the valves that are changed using Appendix A.4. (Bypass SV-8101(9101) isolation per GP-8A.) Document valve line up using Appendix A.4.

| <u>UNIT 2</u> |         |                 | <u>UNIT 3</u> |         |                 |
|---------------|---------|-----------------|---------------|---------|-----------------|
| <u>Sample</u> |         | <u>Position</u> | <u>Sample</u> |         | <u>Position</u> |
| Torus         | 4960D   | Open            | Torus         | 5960A   | Open            |
|               | 4961D   | Closed          |               | 5961A   | Closed          |
|               | 4966D   | Torus II        |               | 5966A   | Torus I         |
|               | 8101    | Open            |               | 9101    | Open            |
|               | 4951B   | Open            |               | 5951B   | Open            |
|               | 4950B   | Closed          |               | 5950B   | Closed          |
|               | AO-8108 | Local           |               | SV-9108 | Local           |
| Lower Drywell | 4960C   | Open            | Upper Drywell | 5960B   | Open            |
|               | 4961C   | Closed          |               | 5961B   | Closed          |
|               | 4966C   | Drywell II      |               | 5966B   | Drywell I       |
|               | 8101    | Open            |               | 9101    | Open            |
|               | 4951B   | Open            |               | 5951B   | Open            |
|               | 4950B   | Closed          |               | 5950B   | Closed          |
|               | AO-8108 | Local           |               | SV-9108 | Local           |

3. No line up needed for secondary containment sample.
4. Obtain the key to the control panel power from Shift Supervision or Chemistry Supervision.
5. Heat trace is to remain on at all times. To restore the heat trace system after loss of power, press the reset button at 20(30)S359. Proper operating temperature will be indicated by the green lights.
6. Decide whether a timed or non-timed sample is desired. If a high activity condition exists, a timed sample should be taken.

PROCEDURE:

1. Drain the system per Appendix A.1.
2. Open N2 bottle valve and regulate to approximately 80 psig. Make sure the gas chiller E-703 is on.
3. With the sump drain system switch in the off position place switch HC-700 (Liquid/gas selector) in the gas position.

4. Put the desired filter cartridge(s) into the cartridge retainer. Put the cartridge retainer into the gas filter drawer. Then put the drawer into the sample station and verify drawer position light is green.
5. Turn gas sample selector switch HC-723 to desired sample source. Position 1 for torus or drywell and position 3 for secondary containment.
6. Open common gas line isolation valve, if a torus or drywell atmosphere sample is desired. (Document on Appendix A.4.)

|               |               |
|---------------|---------------|
| <u>Unit 2</u> | <u>Unit 3</u> |
| AO8108        | SV9108        |

7. Turn the iodine cartridge sample switch HC-712 to position 2 and circulate gas for a period long enough to assure that sample lines are flushed out with gas being sampled. Minimum flush time is approximately 5 minutes.
8. Be sure flow as read by rotameter is in the range of 25 to 35 SCFH.
9. Record the flow FI-725, pressure PI-727, PI-726 (located at sample station) and temperature TI-724 (located on control panel) on data sheet.
10. If a timed sample is desired go to step 11 or if a non-timed sample is desired go to step 13.
11. To take a timed sample, turn HC-704 to yes position and set timer KC-712 between 0 to 30 seconds. Make sure time is short enough that the activity on the filter will not be unnecessarily high.
12. The sample will START TO FLOW through the cartridge at this step. Turn HC-712 to position 3. Observe RI-704's reading to determine if there is a rapid activity buildup. On the data sheet record PI-726, PI-727, FI-725, flow duration, and RI-704. Now go to Step 14.
13. The sample will START TO FLOW through the cartridge at this step. Turn HC-712 to position 3. On the data sheet record PI-726, PI-727, FI-725, flow duration, and RI-704.
14. After appropriate time has elapsed for either timed or untimed, turn HC-712 to position 4 for 10 seconds. A vacuum will be quickly drawn on the system.
15. Turn HC-712 to position 5 which will purge the system with air or nitrogen. Purge for at least 20 seconds or until RI-704 is stable. Record RI-704 on data sheet.
16. Rotate HC-712 to up and off position. Remove filter and cartridge retainer and put them in plastic bags. Tape bags closed. Put drawer back into sample enclosure. Use a pole or rope to increase distance while transporting. Close AO-8108 for Unit 2 and SV-9108 for Unit 3.

17. Perform drain of trap, sump and collector following Appendix A.1. Close FCV-627 by setting PCV-627 to 0 psig.
18. If this is the last sample required, turn all switches to the upright and "off" position (except for HC-723 which is left in position 3) before turning "off" power. File data sheets in Chem. Lab binder. Close N2 bottle valve. Return key to Shift Supervision or Chemistry Supervision.
19. Document that the valves that were lined up for sampling have been returned to normal using Appendix A.4.
20. Return completed Appendix A.4 to Shift Supervision for review at the completion of sampling. File in complete EP-205A.1 file.

EP-205A.1 Post Accident Sampling Station  
Data Sheet for Iodine/Particulate Sample

1. Sample Source \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_
2. Orifice Size 3.0
3. Flush Time in Minutes \_\_\_\_\_ Minutes
4. Sample Flow \_\_\_\_\_ FI-725 (Not thru Cartridge) (scfh)
5. Temperature \_\_\_\_\_ TI-724 ( F)
6. Pressure \_\_\_\_\_ PI-726
7. Pressure \_\_\_\_\_ PI-727
8. Pressure \_\_\_\_\_ PI-726 (Critical flow thru cartridge)
9. Pressure \_\_\_\_\_ PI-727
10. Flow \_\_\_\_\_ FI-725 scfh
11. Radiation Levels \_\_\_\_\_ RI-704
12. Times Sample - Yes or No \_\_\_\_\_
13. Flow Duration \_\_\_\_\_ Seconds
14. Final Radiation Levels \_\_\_\_\_ RI-704

Note: When critical flow is obtained through the cartridge assembly, a flow of 3.0 liters per minute + 15% is achieved. This is true as long as PI-727 is at a minimum of 12 inches mercury vacuum.



SECTION 3 LARGE LIQUID SAMPLE AND/OR A DISSOLVED GAS SAMPLE

PREREQUISITES:

1. System lined up in accordance with C.O.L. S.20.1.
2. Obtain the key to the control panel power from Shift Supervision or Chemistry Supervision.

PROCEDURE:

1. If the RHR line is to be used, have the shift open the RHR sample line valves and document the valves that are changed using Appendix A.4. (By-pass isolation logic per GP-8A.)

| <u>Unit 2</u> | <u>Unit 3</u>   |
|---------------|-----------------|
| AO 8098A      | AO 9098A A Line |
| AO 8099A      | AO 9099A        |
| AO 8098B      | AO 9098B B Line |
| AO 8099B      | AO 9099B        |

2. Perform the drain and blow out operation per Appendix A.1.
3. Open the N2 bottle valve and regulate to approximately 80 psig.
4. Check that the demin water tank is full. Verify that the demin water tank is pressurized to at least 100 psig.
5. Open the tracer gas bottle valve and regulate to 2-3 psig. Record pressure.
6. Make certain the lead shield drawer is out so that the needles under the sample station enclosure are exposed. Quickly inspect the needles with a mirror and flashlight. Check that the longest part of the needle is toward the center of the sample vial.
7. Remove lead stopper from the large volume cask and put a 15 ML sample bottle with an outer aluminum retainer ring and a neoprene cap into the large cask. Note sample bottle must fit snugly in the holder and be vertically aligned. If necessary, place small pad under sample vial. With cask in fully lowered position, roll cask into position under the sample station.
8. If RHR sample is desired, close the sample line valves to feedwater sample sink. (Document on Appendix A.4.)

| <u>Unit 2</u> | <u>Unit 3</u> |
|---------------|---------------|
| AO 8110A      | AO 9110A      |
| AO 8110B      | AO 9110B      |

With control panel power on set switch HC-700 to the liquid position, and liquid sample selector switch HC-626 to position 2 if a jet pump sample is desired or to position 4 if the reactor valves were set for a RHR sample.

9. Push the plunger down which causes the sample bottle to be raised out of the cask and up onto the two needles. Make certain that while positioning the cask on Unit 2 side, the forks are pointing to the right, and on Unit 3 side they must point to the left. Note that the bottle in light will change from red to green. (If cask is not aligned properly, lower bottle and reposition cask.)
10. Using the hydraulic pump slowly raise the cask, checking for proper alignment. Stop pumping when top cask ring is inside and the large volume cask is just below the bottom of the sample station.
11. Place the gas vial in the holder and insert into the dissolved gas sample point. Note that the dissolved gas sample light turns green. If it does not, readjust the vial position.
12. Make certain that HC-616-1 (small volume sample switch) is in the off position.
13. Turn the liquid sample source selector switch HC-626 to position 1 for jet pump bypass line sample or 5 for RHR sample.
14. FI-664 on control panel should be approximately 1 gpm. PI-661, TI-660, CI-663, and RI-665 should start to have meaningful values.
15. Adjust PCV-627 so that the flow on FI-664 is at least 1 gpm. Continue this flow for a long enough period (at least 7 minutes) to be assured that the sample lines are flushed out with liquid being sampled.

Note: Record the flow from FI-664 and flush time on data sheet.

16. When flush is completed, turn HC-626 sample source selector switch to position 2 for a jet pump sample or position 4 if reactor valves were positioned for a RHR sample. Adjust FCV-627 for a flow of 0.3 gpm (to adjust FCV-627 use PCV-627).
17. Turn the dissolved gas and liquid sample system switch HC-601 to position 1 and observe that P-701 starts and valve CV-622 rotates.
18. Turn switch HC-601 to position 2. Observe that P-601 starts.
19. Record the following on the data sheet:

Flow FI-664  
Pressure PI-661  
Temperature TI-660  
Conductivity CI-663  
Radiation RI-665

20. Turn switch HC-601 to position 3 to isolate the sample and start the dissolved gas separator. Leave in this position for approximately 10 seconds.
21. Turn HC-601 to position 4 to inject tracer gas into valve CV-615. When the valve is rotated during the next step the tracer gas trapped in the passage of the ball valve will be inserted in the sample flow loop. Leave in this position for approximately 10 seconds. Read and record the tracer gas supply system pressure so tracer gas can be accurately calculated. The flow of tracer gas should be very small so that pressure drops in the line and valves will be insignificant.
22. Note: If it is not desirable to introduce tracer gas, turn HC-601 to position 5 quickly and valve will not rotate.

Turn HC-601 to position 5. Let some of the dissolved gas separate from the liquid.

23. Read and record initial pressure PI-662 (P-0).
24. Turn HC-601 to position 6\*. Pump P-601 stops and CV-653 opens relieving liquid loop pressure.  
  
\*Note: Do not leave HC-601 in position 6 for more than 5 seconds.
25. Turn HC-601 to position 7. This will bring the rest of dissolved gas into V-610. Leave in position for 10 seconds.
26. Read and record PI-662 on P-1. This will be the approximate pressure of the liquid loop.
27. Turn HC-601 to position 8 for no more than 5 seconds (this will open CV-653 again). Dissolved gas will rise to hold up cylinder V-610 and then into collection chamber V-662.

28. Turn HC-601 to position 9 to get ready to take the dissolved gas sample or to relieve the collection chamber pressure. Pump P-601 will stop so that if the relieve pressure option is next exercised record PI-662 as P2 on data sheet as this is the pressure of the liquid sample loop.
29. To take the dissolved gas sample, switch HC-652 will be used. When HC-652 is turned clockwise to gas sample, the pressure as indicated by PI-662 will decrease while the dissolved gas is drawn into sample bottle. Turn HC-652 to gas sample and hold for at least 10 seconds until PI-662 is very steady. Then release HC-652 and it will spring back to center position. Turn HC-652 again to gas sample. Verify equalized pressure and read PI-662. Record the steady pressure as P3 reading on the data sheet.

30. As an alternate to step 29, when a dissolved gas sample is not desired, it is only necessary to relieve the gas pressure back to the suppression pool by rotating switch HC-652 counter clockwise to the relieve pressure position and hold it while watching PI-662. The pressure will equalize rapidly.
31. If a large volume liquid sample is desired, turn HC-601 to position 10. HC-629-1 must be pushed and held for 10 seconds or more for liquid to be drawn into the sample bottle. If a large liquid sample is not desired, turn switch HC-601 to the off position very quickly so that valve CV-620 will not rotate and no radioactive liquid will be in the line ahead of CV-629.
32. Turn HC-601 to off.
33. Lower liquid sample bottle into large cask by pulling up on the plunger handle. Note: Do not turn or twist bottle while it is on the needles because the needles will bend.
34. Lower the cask on the cart by relieving hydraulic oil pressure with the small petcock handle on the hydraulic cylinder.
35. Roll the cask out from under the sample station and quickly plug cask. Use the cask to transport the sample if greater than 100 m<sup>r</sup>/hr.
36. Open and place gas vial carrying cask near sample station. Remove gas vial positioner from sample enclosure. Keep the vial at maximum distance from the individual and insert sample bottle into the gas vial cask. Close and latch the gas vial cask.
37. Perform a flush of the liquid system with switch HC-628-1.
38. Check that the demin water tank is full. Verify that the demin water tank is pressurized to at least 100 psig.
39. Make sure that FCV-627 is open by adjusting PCV-627 to 15 psig.
40. Switch HC-626 must be in position 2 (jet pump) or 4 (RHR) and HC-700 must be in the liquid position.
41. Turn the flush system switch HC-628-1 to position 2 which will close the inlet sample lines and start the flush with demineralized water from V-501. Observe that there is a flow per FI-664.
42. After RI-665 shows radiation has decreased significantly, or after 5 minutes, turn switch HC-628-1 to position 3 to flush the V-610 loop. Watch RI-665.
43. After a few minutes, turn switch HC-628-1 to position 4 and flush the P-601 loop. Watch RI-665.



44. After a few minutes, turn switch HC-628-1 to position 5 and flush valve CV-615. Watch RI-665.
45. After a few minutes, turn switch HC-628-1 to position 6 and flush the piping station for 3 minutes.
46. Turn switch HC-628-1 to position 7 for a few minutes to flush loop CV-622 again. Watch RI-665.
- 47.. Turn HC-626 to off FIRST and then HC-628-1 to off.
48. If RI-665 did not indicate an acceptable radiation level at any step of the operation, go back and repeat Steps 40 thru 47.
49. Perform the drain of trap, sump and collection following procedure listed in Appendix A.1.
50. If this is the last sample desired, turn all switches to the upright and off position (except for HC-723 which is left in position 3) before turning power off. Close N2 bottle valve and tracer gas bottle valve. Close FCV-627 by setting PCV-627 to 0 psig. File data sheets in Chem. Lab binder. Return key to Shift Supervision or Chemistry Supervision.
51. Take the samples to the appropriate lab for analysis. Have the dissolved gases analyzed for volume of H2, O2, and tracer gas. Calculate % of H2 and O2 on the data sheet.
52. Document that the valves that were lined up for sampling have been returned to normal using Appendix A.4.
53. Return completed Appendix A.4 to Shift Supervision for review at the completion of sampling. File in complete EP-205A.1 file.



EP-205A.1 Post Accident Sampling Station

Data sheet for Large Volume Liquid Sample and/or Dissolve Gas Sample

1. Sample Source \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_
- 1a. Tracer Gas Pressure \_\_\_\_\_ PSIG
2. Bypass Flow \_\_\_\_\_ FI-664 GPM
3. Flush Time \_\_\_\_\_ Minutes
4. Sample Flow \_\_\_\_\_ FI-664 GPM
5. Pressure \_\_\_\_\_ PI-661 PSIG
6. Temperature \_\_\_\_\_ TI-660
7. Conductivity Meter \_\_\_\_\_ Scale \_\_\_\_\_ CI-663
8. Radiation \_\_\_\_\_ RI-665
9. Tracer Gas Supply System Pressure \_\_\_\_\_ PSIG
- 9a. Initial Pressure P-O \_\_\_\_\_ PI-662
10. Pressure P-1 \_\_\_\_\_ PI-662
11. Stabilized Pressure P2 \_\_\_\_\_ PI-662
12. Sample Pressure P3 \_\_\_\_\_ PI-662
13. V1 H2 (From GC) \_\_\_\_\_ ml
14. V2 O2 (from GC) \_\_\_\_\_ ml
15. V2 KR (from GC) \_\_\_\_\_ ml
16. Vol % O2 \_\_\_\_\_ %

$$\text{Vol \% O2} = \frac{V2^{O2} - .2P}{17317} \times \frac{P^{Kr} + 14.7}{V2^{Kr}}$$

17. Vol % H2 \_\_\_\_\_ %

$$\text{Vol \% H2} = \frac{V1^{H2}}{17317} \times \frac{P^{Kr} + 14.7}{V2^{Kr}}$$

Note: Dissolved gas pressure PI-662 is in psig for Unit 2 and psia for Unit 3.

APPENDIX A.4 SMALL VOLUME LIQUID SAMPLE

PREREQUISITES:

1. System lined up in accordance with C.O.L. S.20.1.
2. Obtain the key to the control panel power from Shift Supervision or Chemistry Supervision.

PROCEDURE:

1. If the RHR line is to be used, have the shift open the RHR sample line valves and document the valves that are changed using Appendix A.4. Bypass isolation per GP-8A.

| <u>Unit 2</u> | <u>Unit 3</u>   |
|---------------|-----------------|
| AO 8098A      | AO 9098A A Line |
| AO 8099A      | AO 9099A        |
| AO 8098B      | AO 9098B B Line |
| AO 8099B      | AO 9099B        |

2. Perform the drain and blow out operation per Appendix A.1.
3. Open the N2 bottle valve and regulate to approximately 80 psig.
4. Check that the demin water tank is full. Verify that the demin water tank is pressurized to at least 100 psig.
5. Load the syringe with 10cc of demin water. Place stopcock on the syringe and load the assembly onto the injection port.
6. Check that the small volume cask is in the cask positioner, and that both are hanging from the hooks below the sample station.
7. Remove stopper and carrying handle from the small cask by unscrewing it and lifting it out. Leave stopper near by.
8. Put a 15 ML sample bottle with an outer aluminum retainer ring and neoprene cap into a small volume cask. Check that the bottle lifting lever is free to move up and down. The bottle must fit snugly in the holder and be vertically aligned. If the bottle does not fit snugly, use a small pad of rubber or felt, thick enough to hold vial against the upper yoke of the vial holder.
9. Make certain the lead shielding drawer is out so that the needles under the sample station enclosure are exposed. Quickly inspect the needles with a mirror and flashlight. Check that the longest part of the needle is toward the center of the sample vial.
10. If a RHR sample is desired, close the sample line valves to feedwater sample sink and document on Appendix A.4.

Unit 2      Unit 3

AO8110A      AO9110A  
AO8110B      AO9110B

11. With control panel power on, set switch HC-700 to the liquid position and liquid sample selector switch HC-626 to position 2 if a jet pump sample is desired or to position 4 if the reactor valves were set for a RHR sample.
12. Swing the cask into position under the sample station and lock the arms of the cask holder so the cask and bottle will remain in position.
13. Raise the sample bottle into position on the needles by moving the lever on the side of the cask.
14. Screw the lift rod in to hold the sample bottle in the engaged position. Note: If the vial doesn't clear the entry hole, lower the vial and rotate the small volume cask about 1/8" in either direction. If it still doesn't fit either the liquid vial positioner fixture or liquid tray positioner need adjustment. Note: The green light for the small volume sample should be on. If the light remains red, unscrew the lift rod, lower the bottle and reposition.
15. Turn liquid sample selector switch HC-626 to position 1 for a sample from the jet pump line or to position 5 for a sample from the RHR line. Adjust PCV-627 so that the flow thru FCV-627 is 1 gpm. (See FI-664). Continue this flow thru bypass valve CV-626 for a long enough period to be assured that the sample lines are flushed. The minimum time required to do this is 7 minutes. Record the flow and flush time on the data sheet.
16. After flush is completed, turn switch HC-626 to position 2 (for jet pump sample) or position 4 (for RHR sample). Note that the flow on indicator FI-664 is greatly reduced. Adjust valve FCV-627 for a flow of 0.3 gpm, using PCV-627.
17. Record the following on the data sheet: Flow/FI-664, Pressure/PI-661, Temperature/TI-660, Conductivity/CI-663 and Radiation/RI-665.
18. Turn small volume sample switch HC-616-1 to "Take Sample" position. Valve CV-616 will rotate and carry the sample into alignment with the line to the sample bottle. Wait for valve CV-616 light to come on.
19. Open the stopcock on the syringe and inject 10 cc of water into the line. Close the syringe stopcock. Remove the syringe and fill it with air. Reattach the syringe, open the stopcock and inject the air. Perform this air flushing two or three times.
20. Unscrew the lift rod and lower the sample bottle.
21. Remove the sample from the cask by using cotton liners and gloves. If the sample is greater than 100 mR/hr, use the lead pig to carry the sample to the Chem Lab.

22. Turn the switch HC-616-1 to the flush position. Make sure there is enough flow by adjusting PCV-627 so that it is set to at least 15 psig. Flush for 5 minutes and/or until RI-665 reaches a minimum.
23. When the flush is complete, turn HC-626 off FIRST and then HC-616-1 to off.
24. Perform the drain of trap, sump, and collector following Appendix A.1.
25. If this is the last sample desired, turn all switches to the upright and off position (except for HC-723 which is left in position 3) before turning power off. Close the N2 bottle valve. Close FCV-627 by setting PCV-627 to 0 psig. File data sheet in Chem. Lab binder. Return the key to Shift Supervision or Chemistry Supervision.
26. Document that the valves that were lined up for sampling have been returned to normal using Appendix A.4.
27. Return completed Appendix A.4 to Shift Supervision for review at the completion of sampling. File in completed EP-205A.1 file.

EP-205A.1 Post Accident Sampling Station

Data Sheet for Small Volume Liquid Sample

1. Sample Source \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_
2. Bypass Flow \_\_\_\_\_ FI-664 (gpm)
3. Flush Time \_\_\_\_\_ Minutes
4. Sample Flow \_\_\_\_\_ FI-664 (gpm)
5. Pressure \_\_\_\_\_ PI-661 (psig)
6. Temperature \_\_\_\_\_ TI-660 ( F)
7. Conductivity Meter \_\_\_\_\_ Scale \_\_\_\_\_ CI-663
8. Radiation \_\_\_\_\_ RE-665



APPENDIX A.1 DRAINING TRAP, SUMP AND COLLECTOR

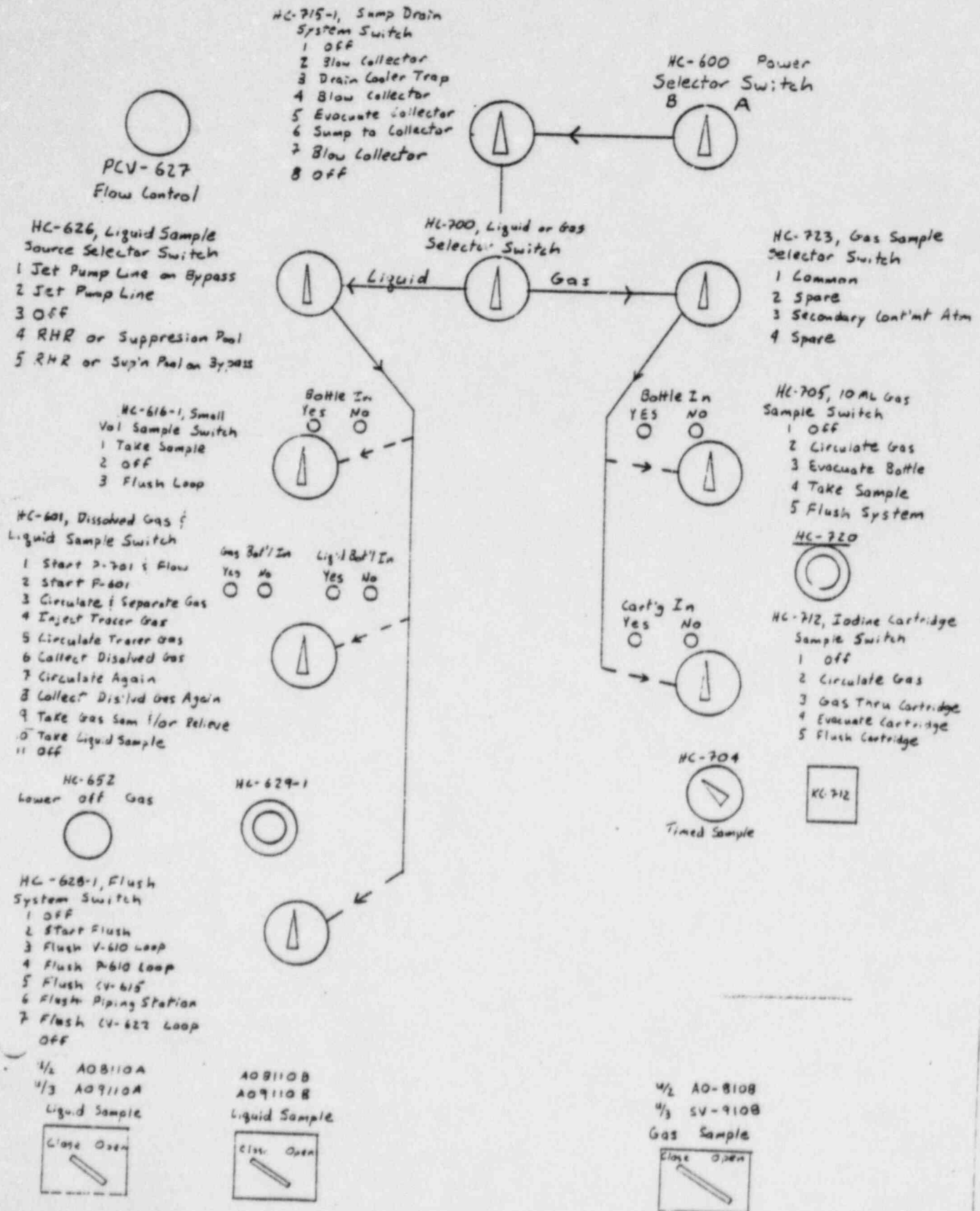
PREREQUISITES:

1. System lined up in accordance with C.O.L. S.20.1.
2. Obtain the key to the control panel power from Shift Supervision or Chemistry Supervision.

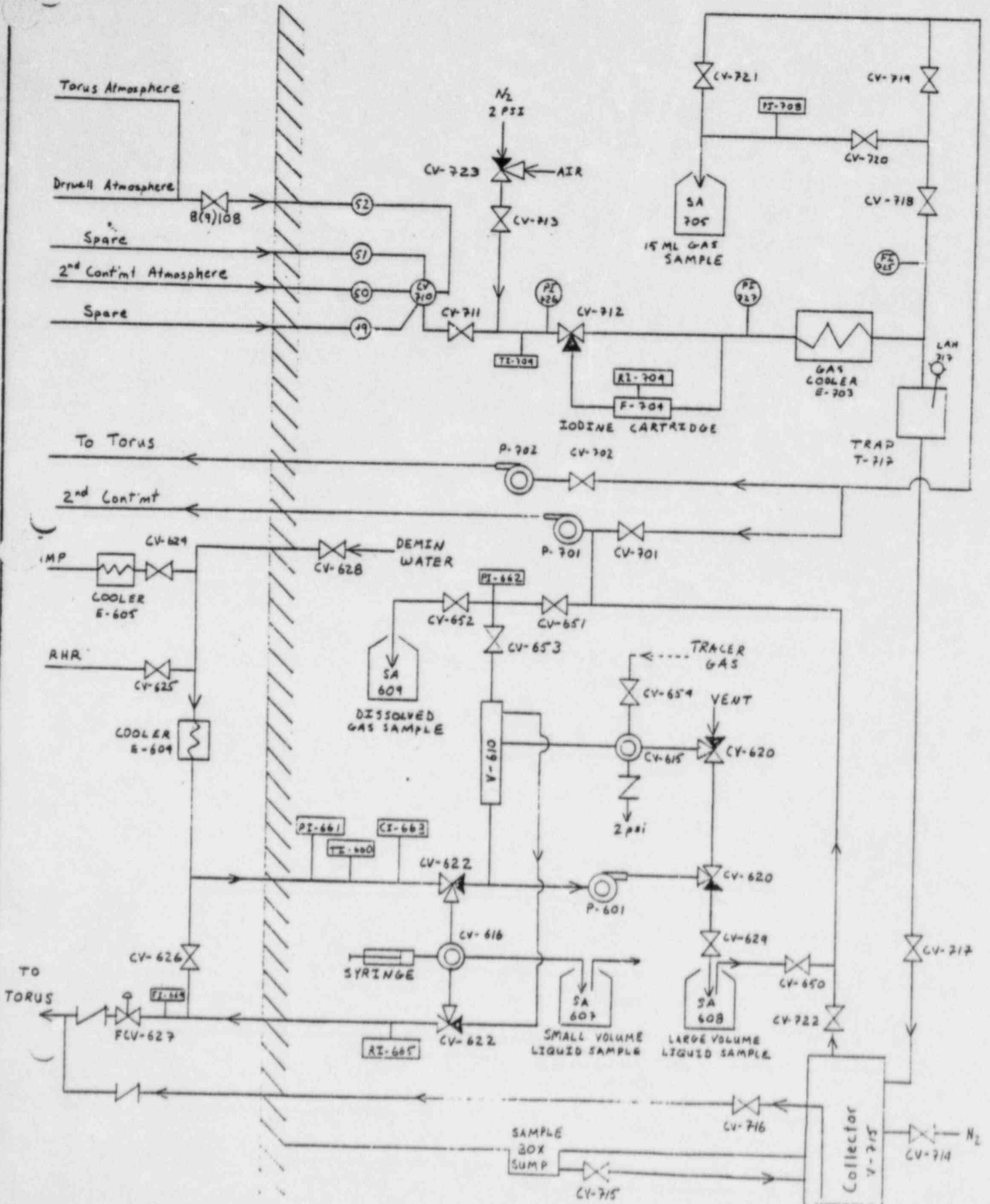
PROCEDURE:

1. Check that the nitrogen supply valves are open and that pressure is set at 80 psig.
2. Check that the demineralized flush water tank V-501 is full and is pressurized to at least 100 psig and that the valves are open to the sample station.
3. Check that FCV-627 is open. If not open, use the knob adjacent to PCV-627 on the control panel to have a 15 psi reading on the gauge.
4. Turn all control panel switches up and off (except for HC-723 which is left in position 3) and then turn the control panel power selector switch to "A" or "B".
5. Drain the collecting tank and sump by turning switch HC-715-1 clockwise through its eight positions. Pause approximately 5 seconds at each position.
6. Turn all switches to their 'off' position, except for HC-723 which is left in position 3 and for the control panel power switch.
7. Return to the original section from which this appendix was referenced.

**APPENDIX A.2 POST ACCIDENT SAMPLING STATION  
CONTROL SWITCHES**



APPENDIX A.3 SCHEMATIC OF POST-ACCIDENT SAMPLE STATION



APPENDIX A.4 DOUBLE VERIFICATION SHEET FOR REACTOR VALVES

Unit \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

A control room operator should circle the valves that are changed for sample line up and initial beside each circle. (Strike out any valves not changed from normal.)

Double Verify with Initials that the System Valves are Returned to Normal (Closed unless required for other sampling - note valves left open)

| <u>Sample</u>    | <u>Unit 2</u> | <u>Unit 3</u> |               |               |
|------------------|---------------|---------------|---------------|---------------|
| Torus I          |               | 5960A _____   | _____         | _____         |
|                  |               | 5961A _____   | _____         | _____         |
|                  |               | 5966A _____   | _____         | _____         |
|                  |               | 9101 _____    | _____         | _____         |
|                  |               | 5951B _____   | _____         | _____         |
|                  |               | 5950B _____   | _____         | _____         |
|                  |               | SV-9108 _____ | _____         | _____         |
|                  |               | Initial _____ | _____         | _____         |
| Torus II         | 4960D _____   |               | _____         | _____         |
|                  | 4961D _____   |               | _____         | _____         |
|                  | 4966D _____   |               | _____         | _____         |
|                  | 8101 _____    |               | _____         | _____         |
|                  | 4951B _____   |               | _____         | _____         |
|                  | 4950B _____   |               | _____         | _____         |
|                  | AO-8108 _____ |               | _____         | _____         |
|                  |               | Initial _____ | _____         | _____         |
| Upper Drywell I  |               | 5960B _____   | _____         | _____         |
|                  |               | 5961B _____   | _____         | _____         |
|                  |               | 5966B _____   | _____         | _____         |
|                  |               | 9101 _____    | _____         | _____         |
|                  |               | 5951B _____   | _____         | _____         |
|                  |               | 5950B _____   | _____         | _____         |
|                  |               | SV-9108 _____ | _____         | _____         |
|                  |               | Initial _____ | _____         | _____         |
| Lower Drywell II | 4960C _____   |               | _____         | _____         |
|                  | 4961C _____   |               | _____         | _____         |
|                  | 4966C _____   |               | _____         | _____         |
|                  | 8101 _____    |               | _____         | _____         |
|                  | 4951B _____   |               | _____         | _____         |
|                  | 4950B _____   |               | _____         | _____         |
|                  | AO-8108 _____ |               | _____         | _____         |
|                  |               | Initial _____ | Initial _____ | Initial _____ |
| At PASS Panel    | AO-8108 _____ | SV-9108 _____ | _____         | _____         |
|                  | Chem.Initial  | Chem.Initial  | Chem.Init.    | Chem.Init.    |

Double Verify with Initials  
that the System Valves are  
Returned to Normal (Closed  
unless required for other  
operations note valves  
left open)

Sample  
RHR

Unit 2

Unit 3

AC9098A \_\_\_\_\_  
AC9099A \_\_\_\_\_  
AC9098B \_\_\_\_\_  
AC9099B \_\_\_\_\_  
Initial

AC8098A \_\_\_\_\_  
AC8099A \_\_\_\_\_  
AC8098B \_\_\_\_\_  
AC8099B \_\_\_\_\_  
Initial

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Initial Initial

At PASS Panel

AC8110A \_\_\_\_\_  
AC8110B \_\_\_\_\_  
Chemist  
Initial

AC9110A \_\_\_\_\_  
AC9110B \_\_\_\_\_  
Chemist  
Initial

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Chemist Chemist  
Initial Initial

Jet Pump

Verify that the Jet Pump Line  
Sample valve is closed, CV-624  
and that the flow by FI-664 is  
zero.

\_\_\_\_\_  
Chemist Chemist  
Initial Initial

Reviewed by Shift Supervision: \_\_\_\_\_

This appendix should be filed in the EP-205A.1 file  
Double Verification Sheet History File in the station  
files.



*RLG:clb*  
*9-18-84*

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-205B RADIATION SURVEY GROUPS

PURPOSE:

To define the actions of the Radiation Survey Groups.

REFERENCES

1. Peach Bottom Atomic Power Station Emergency Plan

| <u>Section</u> | <u>Title</u>  |
|----------------|---------------|
| 5.2.1.5.5.1    | Field Surveys |
| 5.2.1.5.7.2    | Plant Surveys |

2. Health Physics Operating/Chemistry Operating Procedures

| <u>Number</u> | <u>Title</u>   |
|---------------|--|
| HPO/CO-4      | Radiation Work Permits   |
| HPO/CO-8      | Decontamination of Tools and Equipment                               |
| HPO/CO-11     | Establishing and Posting Radiologically Controlled Areas             |
| HPO/CO-60     | Field Use of Eberline Ion Chamber Model RC-1 Radowl                  |
| HPO/CO-62     | Field Use of Eberline GM Detector Model E-400                        |
| HPO/CO-63     | Field Use of Eberline Contamination Monitor Model RM-14              |
| HPO/CO-64     | Field Use of Eberline RM-14 and HP-210 Probe as a Field Scaler       |
| HPO/CO-65     | Field Use of a Low Volume Portable Air Sampler                       |
| HPO/CO-67A    | Field Use of TCS Air Sampling System for the Determination of Iodine |

3. NUREG 0654 Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

#### APPENDICES

- EP-205B-1 Onsite Survey Data Sheet
- EP-205B-2 Emergency Exposure Limits (Emergency Plan Table 6.1)

#### ACTION LEVEL

The Field Survey Group will be activated as necessary by the Dose Assessment Team Leader. The Plant Survey Group will be activated as necessary by the Personnel Safety Team Leader.

#### PRECAUTIONS

1. The group member's exposure should be limited to the administrative guide levels in Appendix EP 205B-4, Emergency Exposure Limits. Team members should control their exposure in accordance with ALARA concepts at all times.
2. If the equipment in use during a survey fails or malfunctions, it must be repaired or replaced; otherwise, the survey team shall retreat to a safe area until the equipment is replaced or repaired.
3. When conducting field surveys from inside a vehicle, readings must be taken with the probe outside the vehicle.
4. Requirements of HPO/CO-4, Radiation Work Permits, are not applicable.

#### IMMEDIATE ACTIONS

- 1.0 Personnel Safety Team Leader shall:
  - 1.1 Report to the TSC (3rd floor Unit One).
  - 1.2 Appoint a Plant Survey Group Leader to direct Plant Survey Squads and assist with In-plant Radiation Surveys.
  - 1.3 Instruct the Plant Group Leaders in the areas to be surveyed.
  - 1.4 Instruct the Plant Group Leaders to report the progress and results of the surveys on a periodic basis via the "operator" radios which they will carry with them when they are dispatched from the Emergency Operations Facility to make surveys.
  - 1.5 Appoint a group member to stay in the Technical Support Center and establish and maintain communications from Plant Survey Groups in order to record survey data for dose assessment purposes.

2.0 Plant Survey Group Leader shall:

- 2.1 Report to the Aux. OSC (Unit 2 Turbine Building El. 116').
- 2.2 Dispatch squads to survey areas in the plant and on-site. A squad consists of 2 H.P. Technicians 'B' or contractor "responsible" technicians.
- 2.3 Post areas as necessary to prevent the spread of contamination and accumulation of large doses of radiation to operating personnel.
- 2.4 Relay the results of the surveys to the Personnel Safety Team Leader and the Control Room.
- 2.5 Provide plant survey group members with sufficient plant status of radiation and contamination hazards to allow them to maintain radiation and contamination exposure to within approved levels.

3.0 Plant Survey Group Members shall:

- 3.1 Report to the Aux. OSC (Unit 2 Turbine Building El. 116').
- 3.2 Obtain necessary equipment for conducting the surveys as assigned by the Plant Survey Group Leader in Step 2.1. Equipment can be obtained from emergency kits in the Emergency Operations Facility or from normal storage location of HP portable instruments. Obtain a sufficient number of data forms (EP-205B - Appendix 1).
- 3.3 Check that equipment is functional before leaving for surveys. Additionally, ensure you possess the proper personnel dosimetry and pocket dosimeter is zeroed, prior to leaving to conduct surveys.
- 3.4 Conduct surveys when directed to do so by the Plant Survey Group Leader. Fill out appropriate sections of Appendix EP 205B-1.
- 3.5 During transit to specified areas, observe the energized survey instruments for changes above background levels. Reference level is waist high from the ground.
- 3.6 Use the GM survey meter to scan close to ground surfaces to detect deposits of contamination. Obtain shielded and unshielded readings to determine Beta/Gamma ratio.
- 3.7 Report data to the Plant Survey Group Leader via "operator" radios or best available communications method.
- 3.8 Air samples are to be taken in count room facilities either at Units 2 and 3, Unit 1, or RMC Van.

3.9 Frisk before leaving any area which may be contaminated.

4.0 Dose Assessment Team Leader shall:

4.1 Report to TSC during an alert or the EOF if activated.

4.2 Appoint a Field Survey Group Leader to direct Field Survey Squads and assist with Field Radiation Surveys.

4.3 Instruct the Field Survey Group Leaders in the areas to be surveyed.

4.4 Instruct the Field Survey Group Leader to report the progress and results of the surveys on a periodic basis via the "operator" radios which they will carry with them when they are dispatched from the Emergency Operations Facility to make surveys.

4.5 Appoint a group member to stay in the Emergency Operations Facility and establish and maintain communications from Field Survey Squads in order to record survey data for dose assessment purposes.

5.0 Field Survey Group Leader shall:

5.1 Report to the EOF (second floor Unit One).

5.2 Dispatch squads, to monitor areas offsite, as designated by the Radiation Protection Team Leader. A squad consists of one H.P. Technician 'B' and one driver.

5.3 Maintain communications with survey teams via operator radios.

5.4 Analyze and relay the collected survey data to the Dose Assessment Team Leader.

6.0 Field Survey Group Members shall:

6.1 Report to the EOF (second floor Unit One).

6.2 Acquire equipment & maps as the situation requires from the Emergency Operations Facility. Ensure you carry proper personnel dosimetry for the surveys you are to perform and pocket dosimeters are zeroed prior to leaving to conduct surveys. Operator radios are located in the Communication Room of the Emergency Operations Facility.

6.3 Inform senior ranking Security officer of vehicle license plate number of field survey vehicles and personnel assigned to those vehicles. During transit to the specified areas, observe the energized survey instruments for changes above background levels. Reference level is waist high from the ground.

- 6.4 Conduct surveys as assigned by the Field Survey Group Leader. (Fill out appropriate portions of Appendix EP 205B-1.) Use GM survey meters to scan close to ground surfaces to detect deposits of contamination. Obtain shielded and unshielded readings to determine Beta/Gamma ratio. All air samples taken should be counted in the field. Refer to HPO/CO-60 thru 67A for methods to take the various field samples required.
- 6.5 Upon completion of the surveys, return the vehicle to a pre-determined area (preferably the Delta Service Building) for possible decontamination.
- 6.6 Survey the vehicle and decontaminate in accordance with HPO/CO-8, Decontamination of Tools and Equipment, as necessary. If the vehicle was contaminated, inform the Field Survey Group Leader.
- 6.7 Report data to the Field Survey Group Leader via "operator" radios.
- 6.8 Frisk before leaving any area which may be contaminated.

FOLLOW-UP ACTIONS

- 1.0 Dose Assessment Team Leader and Personnel Safety Team Leader shall:
  - 1.1 Analyze survey data and relay this data to the Site Emergency Coordinator (if activated) and the Emergency Director.
  - 1.2 Provide the survey teams with appropriate information as to plant status and expected radioactive "plume" movement which may affect the activities of the teams. Advise team members to be cognizant of "plume" and to move to edge of plume after data is collected. (Maximum advantage should be made of time, distance and shielding in accordance with ALARA considerations).
- 2.0 Field Survey Group Members shall:
  - 2.1 In case of failure of primary communications radios, locate the nearest commercial (pay) telephone and pass information via this secondary means of communications.



**PBAPS - RADIATION - CONTAMINATION - AIRBORNE SURVEY**

REPORT NO. \_\_\_\_\_  
 SURVEY NO. \_\_\_\_\_  
 RECORD - UNIT 2  - UNIT 3  - Offsite   
 DATE - \_\_\_\_\_ TIME - \_\_\_\_\_ SURVEY BY - \_\_\_\_\_  
 AREA - (Location) \_\_\_\_\_  
 REASON - \_\_\_\_\_

Instrument Type \_\_\_\_\_  
 Range or Model Number \_\_\_\_\_  
 Serial Number \_\_\_\_\_

**- RADIATION -**

|    | BETA<br>MRAD/HR. | GAMMA<br>MR/HR. | NEUTRONS<br>MREM/HR. | TOTAL<br>MREM/HR. | DISTANCE |
|----|------------------|-----------------|----------------------|-------------------|----------|
| 1. |                  |                 |                      |                   |          |
| 2. |                  |                 |                      |                   |          |
| 3. |                  |                 |                      |                   |          |
| 4. |                  |                 |                      |                   |          |
| 5. |                  |                 |                      |                   |          |

Instrument Type \_\_\_\_\_  
 Range or Model Number \_\_\_\_\_  
 Serial Number \_\_\_\_\_

Type of Samplers and Serial Number \_\_\_\_\_

Type of Counting Instrument & Serial Number \_\_\_\_\_

**- CONTAMINATION -**

| ITEM | BETA+GAMMA<br>DPM/100 cm <sup>2</sup> | ALPHA<br>DPM/100 cm <sup>2</sup> |
|------|---------------------------------------|----------------------------------|
| 1.   |                                       |                                  |
| 2.   |                                       |                                  |
| 3.   |                                       |                                  |
| 4.   |                                       |                                  |
| 5.   |                                       |                                  |
| 6.   |                                       |                                  |
| 7.   |                                       |                                  |
| 8.   |                                       |                                  |
| 9.   |                                       |                                  |
| 10.  |                                       |                                  |

**- AIRBORNE - Total Volume**

|   |              |  |                |
|---|--------------|--|----------------|
| <u>SAMPLING Time</u>  |              | <u>AVERAGE FLOW RATE</u>   | <u>COUNTER</u> |
| START - _____   | STOP - _____ | FT <sup>3</sup> /MIN. _____  | EFF. _____     |
| <u>GROSS COUNTS</u> _____   |              | <u>(ISOTOPE(S))</u><br><br>MPC Functions = $\frac{\mu\text{Ci/cc}}{\text{MPC } I_{131}(\text{---})}$ |                |
| <u>COUNTING TIME</u> _____ MIN.   |              |  |                |
| <u>GROSS COUNTS/MIN.</u> _____  |              |  |                |
| <u>BACKGROUND (CPM)</u> _____   |              |  |                |
| <u>NET CPM</u> _____  |              |  |                |
| <u>*MICRO-CURIES/CUBIC CENT. (SPECIFIC ACTIVITY)</u>  |              |  |                |
| * _____   |              |  |                |
| NET CPM   |              |  |                |
| SCALER EFF. * FILTER EFF. * AREA FRACTION * VOLUME (FT <sup>3</sup> ) * 6.28 * 10 <sup>10</sup> |              |  |                |

**REMARKS/AREA DIAGRAM -**

Specify Activity Based on Gamma Spectroscopy (computer printout)

APPENDIX EP 205B-2

Emergency Exposure Limits

| <u>Function</u>                                    | <u>Projected Whole Body Dose</u> | <u>Thyroid Dose</u>       | <u>Authorized By</u> |
|--|----------------------------------|---------------------------|----------------------|
| 1. Life Saving and Reduction of Injury             | 75 rem*                          | 375 rem                   | Emergency** Director |
| 2. Operation of Equipment to Mitigate an Emergency | 25 rem*                          | 125 rem                   | Emergency** Director |
| 3. Protection of Health and Safety of the Public   | 5 rem                            | 25 rem                    | Emergency Director   |
| 4. Other Emergency Activities                      | 10 CFR 20 limits                 | 10 CFR 20 limits          | Emergency Director   |
| 5. Re-Entry/Recovery Activities                    | Administrative Guidelines        | Administrative Guidelines | N/A                  |

\*Reference: EPA-520/1-75-001 Table 2.1

\*\*Such exposure shall be on a voluntary basis

CONTROLLED APPROVED COPY  
VOID PREVIOUS ISSUE  
DISTRIBUTION PER A-2

EP-205C  
Page 1 of 6, Rev. 3  
RLG:clb

*RLG:clb*  
*9-20-84*

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-205C PERSONNEL DOSIMETRY, BIOASSAY, AND RESPIRATORY PROTECTION GROUP

PURPOSE

To define the actions of the Personnel Dosimetry, Bioassay and Respiratory Protection Group.

REFERENCES

1. Peach Bottom Atomic Power Station Emergency Plan

| <u>Section</u> | <u>Title</u>  |
|----------------|---|
| 5.2.2.2.1.d    | Personnel Dosimetry/Bioassay/Respiratory Protection |
2. Health Physics Operating/Chemistry Operating Procedures

|            |  |
|------------|--|
| HPO/CO-9   | Respiratory Protection Program                                     |
| HPO/CO-9b  | Respiratory Protective Equipment Selection and Use                 |
| HPO/CO-9c  | Respiratory Protective Equipment Maintenance and Quality Assurance |
| HPO/CO-13a | Control of Personnel Dosimetry Badges                              |
| HPO/CO-26  | Personnel Bioassay Program   |
3. NUREG 0654  
Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

APPENDICES

- EP 205C-1 Dosimetric Devices Log  
EP 205C-2 Bioassay Record Form

ACTION LEVEL

The Personnel Dosimetry, Bioassay, and Respiratory Protection Group will be activated whenever there is a need for issuing emergency dosimetry, respiratory protective devices or for emergency bioassay monitoring as determined by the Personnel Safety Team Leader, Emergency Director or the Site Emergency Coordinator.

PRECAUTIONS

None

IMMEDIATE ACTIONS

1.0 Personnel Safety Team Leader shall:

- 1.1 Determine what type of services are required of the Personnel Dosimetry, Bioassay, and Respiratory Group.

Personnel Dosimetry (Part A of this procedure) \_\_\_\_\_

Bioassay, Whole Body Counting, or other bioassay methods (Part B of this procedure) \_\_\_\_\_

Respiratory Protection, Fitting (Part C of this procedure) \_\_\_\_\_

- 1.2 Contact the Personnel Dosimetry, Bioassay and Respiratory Protection Group Leader and inform him of the services needed from Step 1.1. Direct him to assemble the equipment and supplies required for the group to operate, and tell him where services are required.

2.0 Personnel Dosimetry, Bioassay, and Respiratory Protection Group Leader shall:

- 2.1 Assemble the equipment and supplies deemed necessary by the Personnel Safety Team Leader in Step 1.2.
- 2.2 Instruct the group members to perform a check of the equipment they receive.
- 2.3 Direct the group to report to the area specified by the Personnel Safety Team Leader.

PART A, EMERGENCY DOSIMETRY ISSUANCE

1.0 Personnel Dosimetry, Bioassay, and Respiratory Protection Group Leader or his designee shall:

- 1.1 Arrange to obtain a supply of dosimetric devices.
- 1.2 Take the emergency dosimetric devices to the area designated by the Personnel Safety Team Leader.

- 1.3 Coordinate with the Senior Ranking Security Officer, on shift, issuing dosimetry to emergency team personnel and offsite emergency response teams (i.e., ambulance crews, fire-fighting crews, etc.), in accordance with HPO/CO-13a, Control of Personnel Dosimetry Badges.
  - 1.4 Maintain a list of the personnel to whom dosimetric devices are distributed. See Appendix EP 205C-1, Dosimetric Devices Log.
  - 1.5 Commence follow-up actions.
- 2.0 Designated individual in Emergency Operations Facility shall:
- 2.1 Distribute dosimetric devices obtained from Emergency Team Leaders in the Emergency Operations Facility to all personnel who respond to an emergency by reporting to the Unit 1 Emergency Centers.
  - 2.2 Maintain list of individuals issued dosimetry.

PART B, PERSONNEL BIOASSAY

- 1.0 Personnel Dosimetry, Bioassay, and Respiratory Protection Group Leader shall:
- 1.1 Report to the area designated when directed by the Personnel Safety Team Leader and pick up sample containers necessary for bioassay specimens.
  - 1.2 Obtain a list of personnel who may require monitoring for internal contamination from the Personnel Safety Team Leader.
  - 1.3 As soon as practicable, locate these people and obtain necessary samples in accordance with HPO/CO-26, Personnel Bioassay Program.

PART C, RESPIRATORY PROTECTION

- 1.0 Personnel Dosimetry, Bioassay, and Respiratory Protection Group Leader shall:
- 1.1 Report to the area requiring respiratory equipment fitting and supervision, as specified by the Personnel Safety Team Leader.
  - 1.2 Supervise the respiratory fit personnel during the distribution and fit of respiratory protective equipment in accordance with HPO/CO-9, Respiratory Protection Program, HPO/CO-9b, Respiratory Protective Equipment Selection and Use, HPO/CO-9c, Respiratory Protective Equipment Maintenance and Quality Assurance.



FOLLOW-UP ACTIONS

PART A, EMERGENCY DOSIMETRY ISSUANCE

- 1.0 Personnel Dosimetry, Bioassay, and Respiratory Protection Group Leader shall:
- 1.1 Establish a dosimetric device collection station.
  - 1.2 Obtain any remaining information necessary to complete Appendix EP 205C-1.
  - 1.3 Arrange to have dosimetric devices processed.

FOLLOW-UP ACTIONS

PART B, PERSONNEL BIOASSAY

- 1.0 Personnel Dosimetry, Bioassay, and Respiratory Protection Group Leader shall:
- 1.1 Compare the results of the bioassay analysis with the most recent analysis performed on the person (if available) prior to the emergency.
  - 1.2 Report results to the Personnel Safety Team Leader.

FOLLOW-UP ACTIONS

PART C, RESPIRATORY PROTECTION

- 1.0 Personnel Dosimetry, Bioassay, and Respiratory Protection Group Leader shall:
- 1.1 Recover respiratory equipment and process for re-use in accordance with applicable section of HPO/CO-9c.



APPENDIX EF 205C-2  
BIOASSAY RECORD FORM

| Name | Soc. Sec. No. | PROD Payroll or Vendor Code No. | Type of Analysis | Date | Team Mbr. Initials | Doctn., Bioassay, Resp. Prot. Suprv. Initials |
|------|---------------|---------------------------------|------------------|------|--------------------|---|
| 1    |               |                                 |                  |      |                    |   |
| 2    |               |                                 |                  |      |                    |   |
| 3    |               |                                 |                  |      |                    |   |
| 4    |               |                                 |                  |      |                    |   |
| 5    |               |                                 |                  |      |                    |   |
| 6    |               |                                 |                  |      |                    |   |
| 7    |               |                                 |                  |      |                    |   |
| 8    |               |                                 |                  |      |                    |   |
| 9    |               |                                 |                  |      |                    |   |
| 10   |               |                                 |                  |      |                    |   |

Note 1: Type of Analysis  
 MB = Whole Body Count  
 U = Urine Sample  
 S = Stool Sample

Forwarded to \_\_\_\_\_ For Retention  
 Date Forwarded \_\_\_/\_\_\_/\_\_\_ By \_\_\_\_\_

Comments:

---



---



---



---

CONTROLLED APPROVED COPY  
VOID PREVIOUS ISSUE  
DISTRIBUTION PER A-2

EP-207  
Page 1 of 5, Rev. 6  
RLG:clb

*Handwritten signature*  
9-20-84

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-207 PERSONNEL SAFETY TEAM ACTIVATION

PURPOSE:

To define the actions necessary to activate and assemble the Personnel Safety Team. The Personnel Safety Team performs the functions of Search and Rescue, First Aid, Personnel and Vehicle Monitoring and Decontamination, Plant Survey, and Personnel Dosimetry, Bioassay, and Respiratory Protection.

REFERENCES:

1. Peach Bottom Atomic Power Station Emergency Plan

| <u>Section</u> | <u>Title</u>                               |
|----------------|--|
| 5.2.1.5.7      | Personnel Safety Team                      |
| 6.7.1.1.4      | Evacuation, Reassembly, and Accountability |

2. Health Physics Operating/Chemistry Operating Procedures

| <u>Number</u> | <u>Title</u>  |
|---------------|---|
| HPO/CO-6      | Personnel Contamination Survey Techniques                             |
| HPO/CO-7      | Personnel Decontamination Procedure                                   |
| HPO/CO-8      | Decontamination of Tools and Equipment                                |
| HPO/CO-14     | Identification and Control of Tools and Equipment in Controlled Areas |

3. NUREG 0654  
Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

APPENDIX:

EP-207-1 Emergency Exposure Limits (Emergency Plan Table 6.1)

ACTION LEVEL:

The Emergency Director or Interim Emergency Director shall activate the Personnel Safety Team at his discretion.

PRECAUTIONS:

1. Team member's exposure should be limited to the administrative guide levels in Appendix EP 207-1, Emergency Exposure Limits. The Emergency Director shall approve any team member exceeding Peach Bottom quarterly exposure limits. Personnel Safety Team members shall control their own exposure in accordance with ALARA concepts.
2. Vehicles requiring decontamination could be decontaminated utilizing appropriate decontamination procedures at any of the following assembly areas:
  - a) North Sub Station
  - b) President's Utility Building (PUB)
  - c) Delta Service Building
3. Permission of the Site Emergency Coordinator is required before decontamination of any vehicles due to large contamination control problems associated with this procedure.

IMMEDIATE ACTIONS:

- 1.0 Emergency Director or Interim Emergency Director shall:
  - 1.1 Designate a Plant Operator to assume the role of Interim Personnel Safety Team Leader and direct this person to assemble the Interim Personnel Safety Team from available resources.
  - 1.2 Inform the Interim Personnel Safety Team Leader of the reason for the team being activated.
  - 1.3 Instruct the Interim Personnel Safety Team Leader to assemble the Interim Personnel Safety Team in the Operations Support Center on 135' elev. turb. bldg. or the Control Room, if the 135' elev. Operations Support Center is not habitable, for instructions (or as directed by the Emergency Director or Interim Emergency Director).
  - 1.4 Call the Personnel Safety Team Leader. If the situation permits, discuss the problem with the Personnel Safety Team Leader so he can assess the situation and determine how many team members will be necessary for anticipated operations. If site evacuation has occurred, the Personnel Safety Team Leader and alternate will be stationed at the designated assembly area (either North Substation or PUB).
- 2.0 Interim Personnel Safety Team Leader shall:
  - 2.1 Assign available personnel from the Operations Support Center or main control room to the required Personnel Safety Team Sub-groups to carry out applicable portions of the following procedures as necessary.

EP 207A Search and Rescue  
EP 207C First Aid



EP 207D Personnel Monitoring and Decontamination (Assembly Area)  
EP 205B Radiation Survey Group - Plant Surveys  
EP-205C Personnel Dosimetry, Bioassay, and Respiratory Protection  
Group

3.0 Interim Personnel Safety Team Members shall:

3.1 Follow the directions of the Interim Personnel Safety Team Leader.

4.0 Personnel Safety Team Leader shall:

4.1 Report to the Technical Support Center and coordinate with Personnel Safety Team to provide Emergency Director with site radiological data/  
/personnel injury/contamination status and site evacuation status.

4.2 Utilize necessary members of the Personnel Safety Team to man Site Radiological Status Board and Communications in the Technical Support Center.

4.3 Ensure Personnel Safety Team members available at assembly areas (HP&C OSC on 116' elev. turb. bldg and designated evacuation assembly area).

4.4 Assign team members to functional groups as necessary in accordance with the following procedures:

|  |         |
|--|---------|
| Search and Rescue  | EP 207A |
| First Aid  | EP 207C |
| Personnel Monitoring and Decontamination                           | EP 207D |
| Vehicle and Evacuee Control  | EP 207E |
| Vehicle Decontamination Procedure                                  | EP 207F |
| Radiation Survey Group - Plant Surveys                             | EP 205B |
| Personnel Dosimetry, Bioassay, and<br>Respiratory Protection Group | EP-205C |

4.5 Designate Group Leaders for the functional groups formed.

4.6 Direct team members to assemble the equipment that will be needed to perform anticipated tasks (surveys, calculations, etc.).

4.7 Maintain communications via any available means with the groups after they have been sent to perform their assigned tasks.

4.8 Provide Plant Survey Group members with periodic plant status changes including significant radiation exposure and radioactive contamination problems which may affect the functions of the team.

4.9 Coordinate dispatching the Plant Survey Group under direction of the Emergency Director.

5.0 Personnel Safety Team Members shall:

- 5.1 Report to the areas designated by the Interim Personnel Safety Team Leader or Personnel Safety Team Leader as quickly as possible.
- 5.2 Obtain emergency equipment stored in the HP&C Operations Support Center on 116' elev. turbine bldg. or the Emergency Operations Facility as directed by the Personnel Safety Team Leader.
- 5.3 Verify operability of the emergency equipment assembled in the HP&C Operations Support Center on 116' elev. turb. bldg. or the Emergency Operations Facility.
- 5.4 Follow the directions of the Interim Personnel Safety Team Leader or the Personnel Safety Team Leader.

Appendix EP 207-1  
Emergency Exposure Limits

| <u>Function</u>   | <u>Projected<br/>Whole Body<br/>Dose</u> | <u>Thyroid<br/>Dose</u>      | <u>Authorized<br/>By</u> |
|---|--|------------------------------|--------------------------|
| 1. Life Saving<br>and Reduction<br>of Injury                | 75 rem*                                  | 375 rem                      | Emergency**<br>Director  |
| 2. Operation of<br>Equipment to<br>Mitigate an<br>Emergency | 25 rem*                                  | 125 rem                      | Emergency**<br>Director  |
| 3. Protection<br>of Health and<br>Safety of the<br>Public   | 5 rem                                    | 25 rem                       | Emergency<br>Director    |
| 4. Other<br>Emergency<br>Activities                         | 10 CFR 20<br>limits                      | 10 CFR 20<br>limits          | Emergency<br>Director    |
| 5. Re-Entry/<br>Recovery<br>Activities                      | Administrative<br>Guidelines             | Administrative<br>Guidelines | N/A                      |

\*Reference: EPA-520/1-75-001 Table 2.1

\*\*Such exposure shall be on a voluntary basis

CONTROLLED APPROVED COPY-  
VOID PREVIOUS ISSUE  
DISTRIBUTION PER 1-2  
PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

9-21-84

EP-209 TELEPHONE LIST FOR EMERGENCY USEPURPOSE:

To designate members of the Emergency Teams and to supply pertinent company and non-company emergency support personnel telephone numbers.

PROCEDURE:

The names and telephone numbers listed in the appendices of this procedure are arranged for use in an emergency. Each appendix represents a specific group of personnel. In some cases, a name will appear in more than one appendix. The appendices are:

| <u>Appendix No.</u> | <u>Description</u>                                    |
|---------------------|---|
| A                   | Immediate Notification Lists                          |
| C                   | Peach Bottom Station Supervision                      |
| D1                  | On Site Emergency Team Leaders                        |
| D2                  | Dose Assessment Team                                  |
| D3                  | Fire and Damage Team                                  |
| D4                  | Personnel Safety Team                                 |
| D5                  | Security Team   |
| D6                  | Re-Entry Team   |
| D7                  | Technical Support Center Group                        |
| D8                  | Chemistry Sampling & Analysis Team                    |
| E                   | Corporate Emergency Team Leaders & Support Personnel  |
| F                   | United States Governmental Agencies                   |
| G                   | Emergency Management Agencies                         |
| H                   | P.E. Company Consultants and Contractors              |
| I1                  | Field Support Personnel                               |
| I2                  | Rad Services Call List                                |
| J                   | Nearby Public & Industrial Users of Downstream Waters |
| K                   | Miscellaneous   |
| L                   | Local PECO Phones                                     |
| N                   | Medical Support Groups                                |
| P                   | 60 Minute Call Procedure                              |

INTERIM FIRE AND DAMAGE TEAM LEADERS

Shift Supervisors: Refer to Alternate Emergency Director

FIRE AND DAMAGE TEAM

The Fire and Damage Team consists of the interim team members, the on-shift P.O.'s, APO's, and A.O.'s. The team is augmented by other personnel who are on-site or called in. The augmenting forces are trained in fire fighting but not necessarily in the emergency plan. These augmenting forces operate under the direction of the team members and leaders who have had emergency plan training. The augmenting forces are:



1. Staff engineers and test engineers
2. Maintenance personnel
3. Construction personnel
4. Janitors and Storeroom personnel
5. Delta-Cardiff Volunteer Fire Department

Most personnel in Groups 1 through 4 receive PECO fire training; Group 5 personnel are trained in fire fighting by the Delta-Cardiff Volunteer Fire Company.

#### PERSONNEL SAFETY TEAM

The personnel safety team is made up of on-shift P.O.'s, A.P.O.'s, and A.O.'s who are trained in the Emergency Plan Procedures. The team is augmented by other site personnel such as plant janitors, test engineers, health physics technicians, and others who are not necessarily trained in the Emergency Plan but will assist under the direction of the team leaders and members.

#### SEARCH AND RESCUE GROUP/FIRST AID GROUP

The search and rescue group is organized by the Personnel Safety Team Leader at the direction of the Emergency Director. It will consist of personnel who are available which knowledgeable of the plant layout and recognize conditions which could result from the existing emergency condition. The purpose of this team is to search plant areas quickly to locate and rescue victims. Personnel who know plant layout and are available make up this team are from the following groups:

|                 |                         |
|-----------------|-------------------------|
| Shift Operators | Construction            |
| Test Engineers  | H.P. Technicians        |
| Staff Engineers | Susquehanna Test Branch |
| Maintenance     | Field Engineers         |
|                 | Plant Janitors          |

#### INTERIM SECURITY TEAM LEADER AND TEAM MEMBERS

The security team is made up of the Guard Force. The sergeant of the guard is the Interim Team Leader. The guard force is trained in security and necessary Emergency Plan Procedures.

#### RE-ENTRY TEAM

The Re-Entry Team will be made up of available personnel. It is anticipated that personnel with some radiological controls experience or training would be used. Personnel from the following groups are available:

|                 |                             |
|-----------------|-----------------------------|
| Shift Personnel | HP Technicians              |
| Staff Engineer  | Some Maintenance Personnel  |
| Test Engineers  | Some Construction Personnel |

Specialized training is not required for personnel other than the team leaders.



TECHNICAL SUPPORT CENTER GROUP

The Technical Support Center Group is organized by the Emergency Director. It consists of various staff, administrative, and consulting personnel who can jointly provide recommendations to the Emergency Director intended to correct and improve emergency conditions.

REVIEW REQUIREMENTS:

1. Changes to this procedure proper shall be in accordance with A-4.
2. Additions, deletions, or changes of names or responsibilities on the appendices shall be PORC approved in accordance with A-4.
3. Corrections by addresses or phone numbers on the appendices may be handled by the secretarial staff without PORC review and approval; however, these appendices must be signed by the superintendent or alternate.

CONTROLLED APPROVED COPY-  
VOID PREVIOUS ISSUE  
DISTRIBUTION PER A-2

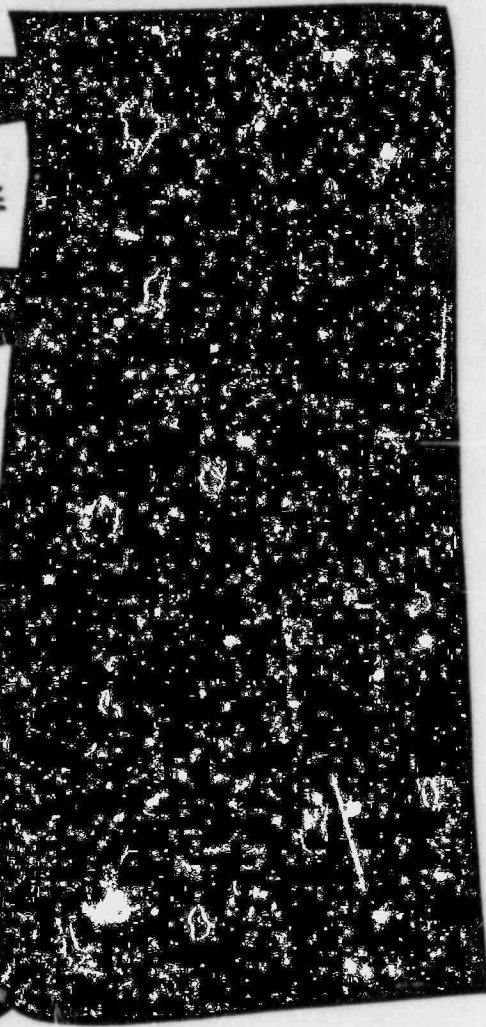
EP-209  
APPENDIX C  
Page 1 of 5, Rev. 13  
RLG:clb

*[Handwritten Signature]*  
9-21-84

PHILADELPHIA ELECTRIC COMPANY

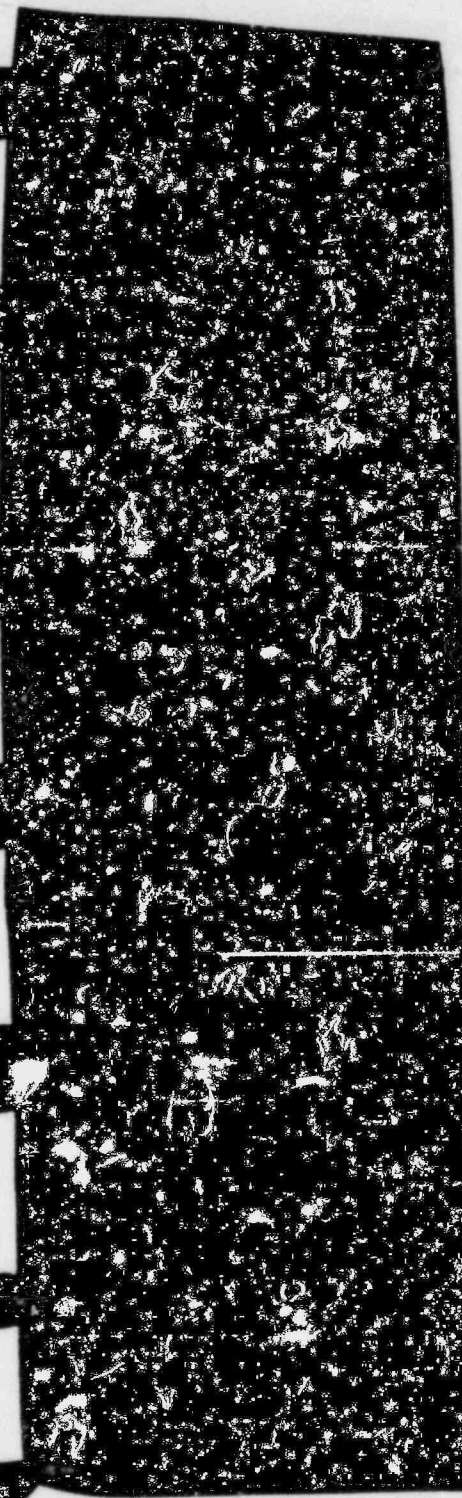
PEACH BOTTOM UNITS 2 AND 3

EP-209 APPENDIX C - PEACH BOTTOM STATION SUPERVISION

| <u>Station Superintendent</u>           | <u>Home Phone</u>   | <u>Centrex</u> |
|---|---|----------------|
| R. S. Fleischmann                       |  |                |
| <u>Assistant Station Superintendent</u> |   |                |
| D. C. Smith                             |   |                |
| <u>Engineer - Outage Planning</u>       |   |                |
| F. W. Polaski                           |   |                |
| <u>Engineer - Maintenance</u>           |   |                |
| J. K. Davenport                         |   |                |
| <u>Engineer - Technical</u>             |   |                |
| J. E. Winzenried                        |   |                |

Engineer - Operations

S. R. Roberts



Engineer - HP & C

A. E. Hilsmeier

Engineer - Administration

S. J. Kovacs

Results Engineer

J. F. Mitman

Performance Group

G. F. Dawson

Security Supervisor

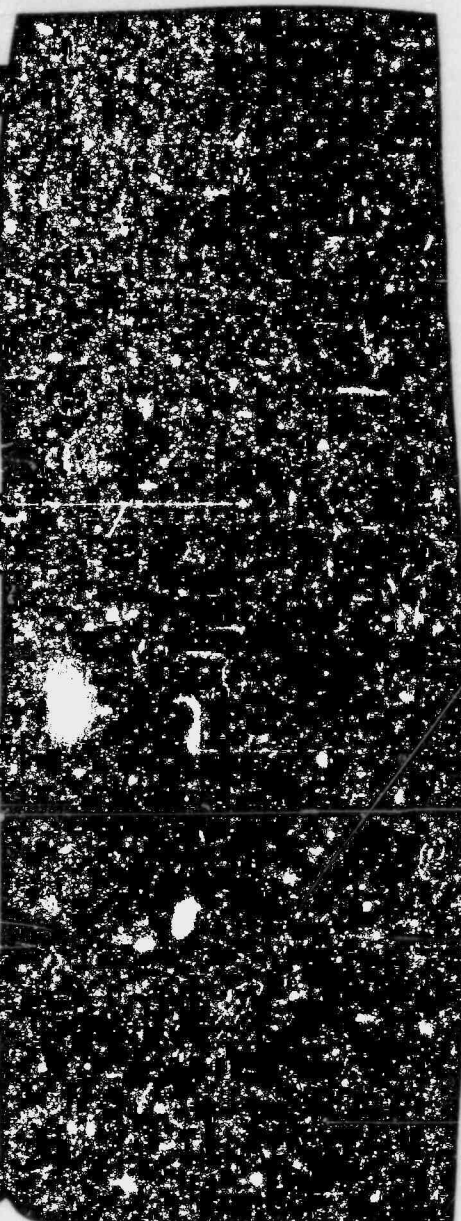
S. Q. Tharpe

Engineer - I&C

J. C. Clupp

Engineer - Chemistry

H. L. Watson



Engineer-Health Physics

N. F. Gazda

Quality Engineer

S. A. Spitko

Assistant Maintenance Engineer

D. B. Warfel

Engineer - Reactor

A. J. Wasong

Chemist

G. Barley



Individuals below are not required to be notified during an Alert, Site Emergency, or General Emergency.

Shift Superintendent

H. L. Metz

W. O. Pieper

T. J. Donaghy

W. B. Widener

D. R. Filson

F. J. Pfender, Jr.

Shift Supervisor

R. Sheetz

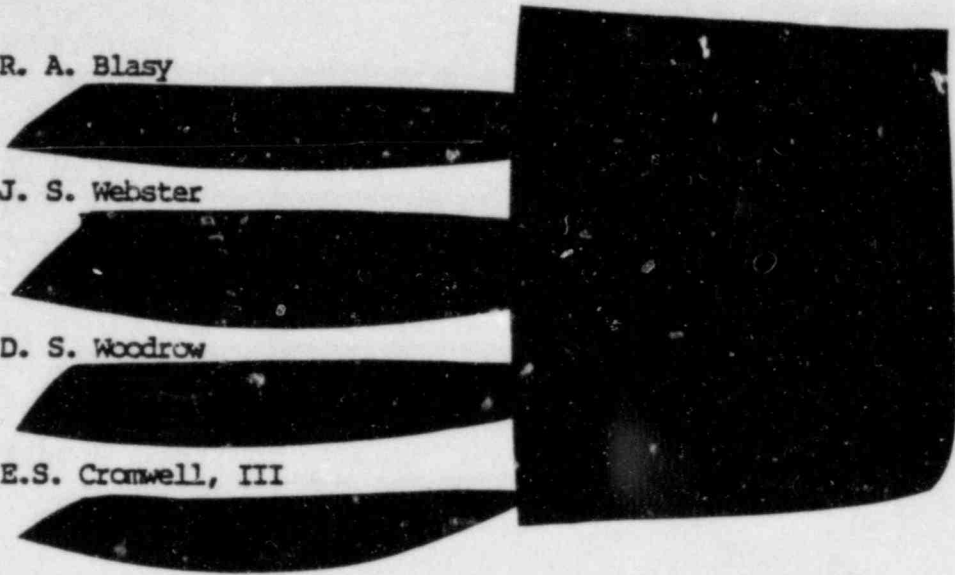
E. Alwood

A. R. Wargo

T. H. Jones



R. A. Blasy



J. S. Webster

D. S. Woodrow

E.S. Cromwell, III

*Al Smith*  
9-15-84

EP-209 APPENDIX D-7 TECHNICAL SUPPORT CENTER GROUP

Emergency Director

Home

Centrex

R. S. Fleischmann

Alternate

D. C. Smith

Technical Engineer

J. E. Winzenried

Alternates

S. A. Spitko

S. R. Roberts

J. F. Mitman

G. F. Dawson

A. J. Wasong

Supervising Engineers & Alternates

Outage Planning Engineer

F. W. Polaski

Alternate: T. Niessen

Administration Engineer

S. J. Kovacs

Results Engineer

J. P. Mitman

Alternate: J. Jordan

I & C Engineer

J. L. Clupp

Alternate: S. Hess

Performance Group:

G. F. Dawson

Reactor Engineer

A. J. Wasong

Alternate: J. T. Budzynski

Plant Chemist

H. L. Watson

Alternate: G. Barley

Quality Assurance Engineer

S. A. Spitko

Alternate: R. M. Sware

Maintenance Engineer \*\*\*

J. K. Davenport

Alternate: D. B. Warfel

Senior Health Physicist \*\*\*

A. E. Hilsmeier

Alternate: N. F. Gazda

Applied Health Physicist \*\*\*

N. F. Gazda

Alternate: C. S. Nelson


Record Keeper and Communicator

See EP-209 Appendix I-1 for personnel to fill this position.



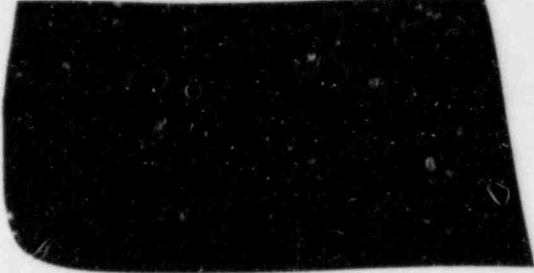
Data Display Operators - 2 required

Notify one of the five persons in the order listed below. The person notified will contact two Data Display Operators.

1. R. O. Carr
  2. K. T. Voight
  3. C. E. Andersen
  4. D. A. Davridge
  5. D. D. Burguard
- 

\*\*\* Required to report to the EOC when activated.

Secretaries  
2 required

- L. McCleary
  - W. Felts
  - T. Hutton
  - C. Brainerd
  - S. Holgate
  - J. Williams
  - J. Wiley
- 

Home

Centrex

CONTROLLED APPROVED COPY-  
VOID PREVIOUS ISSUE  
DISTRIBUTION PER A-2  
PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 & 3

EP-209  
Appendix D-8  
Page 1 of 1, Rev. 0

RLG:mdw

*RLG*  
9-20-84

EP-209 APPENDIX D-8 CHEMISTRY SAMPLING & ANALYSIS TEAM

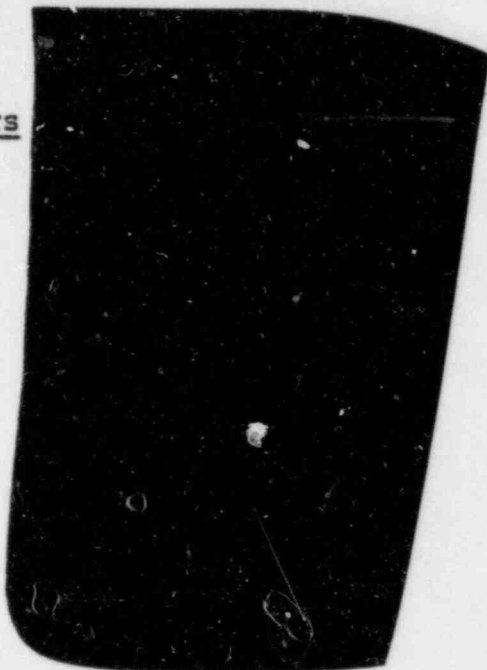
Chemistry Sampling & Analysis Team Leader      Home Phone      Centrex

Harry Watson



Alternate Chemistry Sampling & Analysis Team Leader

G. Barley



Chemistry Sampling & Analysis Team Members

D. Odell

J. Valinski

T. King

B. Wargo

D. Chase

R. Arters

F. Kovacs

W. Hoopes

Supplemental Forces are available from Rad Services Inc. Appendix I-2.

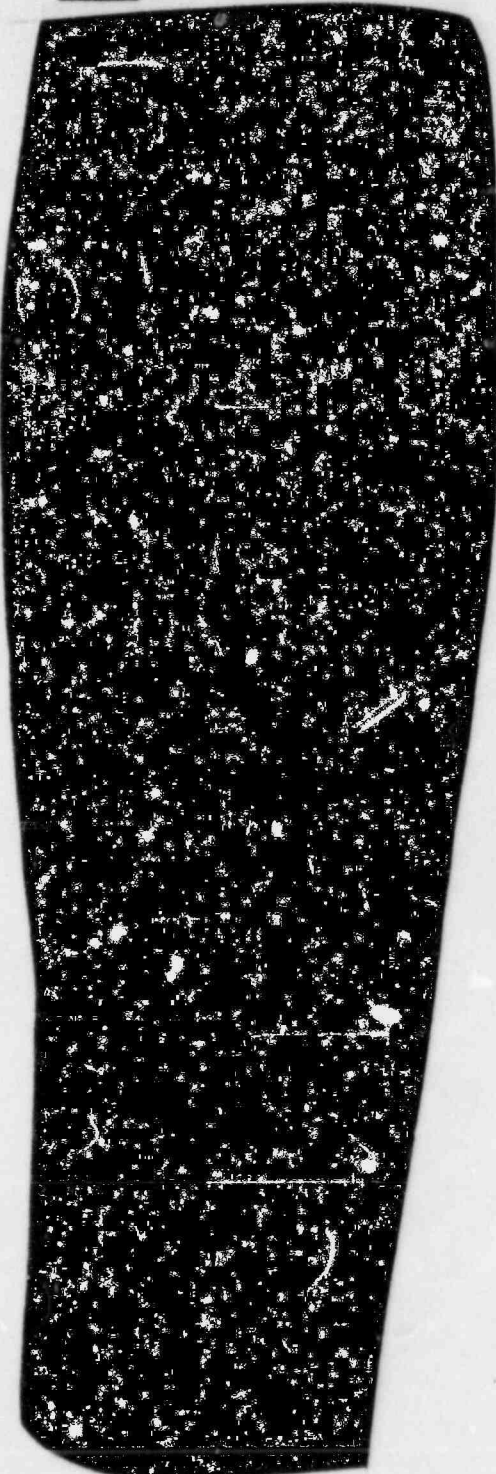


*W. Smith*  
9-20-84

EP-209 APPENDIX I-1 FIELD SUPPORT PERSONNEL

Phone

- J. T. Budzynski
- C. E. Koppenhaver
- R. H. Wright
- J. G. Hufnagel
- P. L. Bushek
- M. S. Meckley
- C. N. Swenson
- G. A. John
- K. J. Goetz
- M. J. Lingenfelter
- K. May
- G. F. Verba
- K. R. Moser
- L. F. Vernacchio
- K. J. Bunch
- K. A. Schoenknecht
- D. L. Keene
- S. M. Hess
- L. Cobosco
- C. E. Watkins
- M. Coleman
- S. Herr



D. Wheeler

J. Rogermuser

D. Foss

B. F. Maguire

J. Capperella

R. Stott

J. Jordan

M. Zarroli

T. Geyer

C. Schell

J. J. McCormick, Jr.

C. S. Kerr

W. C. Frederick

M. J. Kelly

G. Siefert

M. Restaino

B. Geiger

P. Maguire

J. Heyne

S. Gresh

J. Gallaher

M. S. Sattler

T. Blumm

R. A. Brower

G. H. Gellrich  
J. E. Hessler, Jr.  
S. J. Mannix  
F. F. Mascitelli  
S. L. Wookey  
J. Troiano  
Y. Young  
K. McGuigan  
T. Rock  
L. Martin  
J. Lehane  
M. Aljerfer  
L. Baccino  
S. Glenn  
R. Frisby  
E. Naill  
J. Coval  
D. Shaulis  
J. Kovalchick  
D. Horne  
D. Shortes  
C. J. Campbell  
D. Bertocchi  
J. Anthony  
B. Petty  
L. Ericson

M. Fanelli

J. Lindinger

P. Navin



CONTROLLED APPROVED COPY-  
VOID PREVIOUS ISSUE  
DISTRIBUTION PLAN A-2

EP-209  
APPENDIX I-2  
Page 1 of 1, Rev. 12  
RLG:clb

*W. H. H.*  
9-15-84

PHILADELPHIA ELECTRIC COMPANY

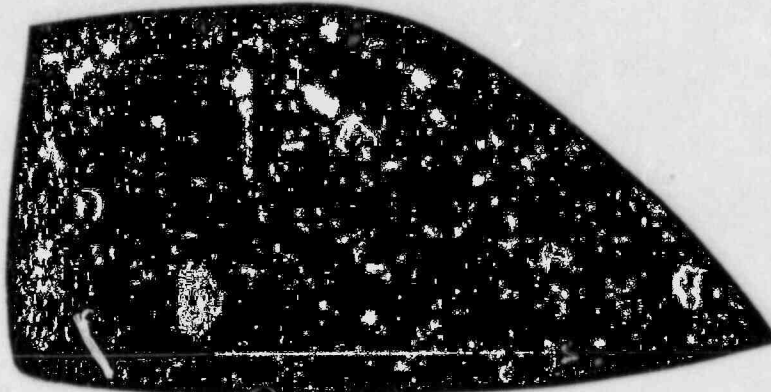
PEACH BOTTOM UNITS 2 & 3

EP-209 APPENDIX I-2 - CHEMISTRY AND HEALTH PHYSICS CONTRACTOR CALL LIST

Chemistry (Rad Services, Inc.)

Crowe, D.  
Casey, J.  
Chase, D.  
Gasper, J.  
Leone, B.  
Miller, T.  
Howell, S.  
Sarge, R.

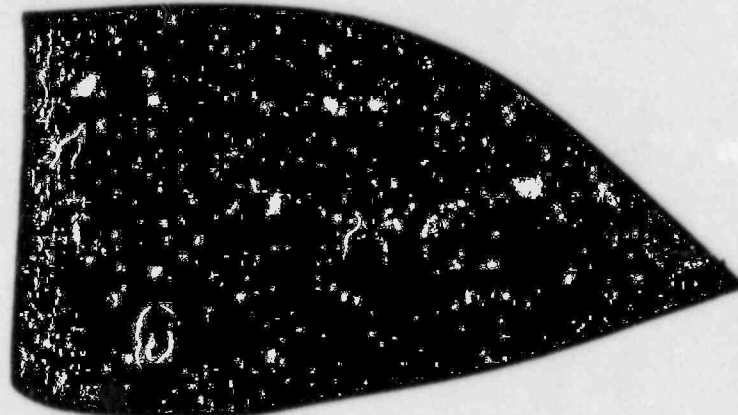
Pittsburgh, PA Office  
Rad Services



Health Physics (Bartlett Nuclear, Inc.)

Ipoletta, D.  
Kiman, B.  
Snidga, R.  
Rogers, W.  
Chrostowski, J.

Plymouth MA Office





*[Handwritten Signature]*  
9-18-84

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-210 Dose Assessment Team

Purpose:

To define the actions of the Dose Assessment Team.

References:

- Peach Bottom Atomic Power Station Emergency Plan Section  
5.2.1.5.6 and 6.6.1  
EP 316 Cumulative Population Dose Calculations  
EP 317 Determination of Protective Action Recommendations  
EP 318 Liquid Release Dose Calculations - Water  
EP 319 Liquid Release Dose Calculations - Fish  
EP 325 Methodology for Using the Containment Radiation  
Monitor Dose Rate vs. Time Curves to Estimate Source  
Term Available for Release  
EP 209 Appendix P - Staffing Augmentation

Appendices:

- EP 210-1 Dose Assessment Procedures & Application  
EP 210-2 Contacting Radiation Management Corporation (RMC)

Action Level:

The Dose Assessment Team shall be activated by the Emergency Director.

Immediate Actions:

1.0 Dose Assessment Team Leader shall:

- 1.1 Upon notification of an alert or above condition, activate team members, assign emergency roles and direct them to report to EOF.
- 1.2 Proceed to EOF (second floor Unit 1)
- 1.3 Establish contact with the Site Emergency Coordinator (or Emergency Director under Alert Condition).
- 1.4 Coordinate dispatching the field survey squads under the direction of the Site Emergency Coordinator or the Emergency Director.

- 1.5 Initiate calculations as necessary, see Appendix I.
  - 1.6 Upon completion of EP 316 calculations, implement EP 317, Determination of Protective Action Recommendations.
- 2.0 Dose Assessment Team Members shall:
- 2.1 Check supply of data and work sheets and calculators.
  - 2.2 Establish data acquisition mode; i.e., TV monitors or direct link to control room.
  - 2.3 Perform calculations as directed.
  - 2.4 Calculate integrated and projected dose and post on status board.

NOTE: Status Board keeper will post board and transmit copies of status board data to TSC and HQ ESC.

Follow Up Actions:

- 1.0 Dose Assessment Team Leader shall:
- 1.1 Coordinate with the Chemistry Sampling and Analysis Team Leader to obtain chemistry sampling and analysis data.
  - 1.2 Keep Emergency Director, Site Emergency Coordinator, and Health Physics and Chemistry Coordinator informed of dose projections.
  - 1.3 Prepare Appendix EP-210-2, Contacting Radiation Management Corporation (RMC), when requested by the Site Emergency Coordinator.
  - 1.4 Establish contact with Pennsylvania Bureau of Radiation Protection and Maryland Division of Radiation Control representatives in the EOF and keep these agencies informed.
  - 1.5 Participate in EOF briefings and provide current dose assessment and protective action information.
- 2.0 Dose Assessment Team Members shall:
- 2.1 Continue to refine calculations as new data becomes available.


Appendix EP-210-1  
DOSE ASSESSMENT PROCEDURES APPLICATION

| <u>Input Radiological Data</u>               | <u>Applicable Procedure</u>   |
|--|---|
| Normal range monitor release rate            | EP 316 Manual or Computer Method to determine dose  |
| High range monitor release rate              | EP 316 Manual Method to determine release rate for Manual or Computer Method                                    |
| Containment rad monitor dose rate            | EP 325 to estimate release rate for Manual or Computer Method   |
| Particulate filter and Iodine cartridge data | EP 316 Manual or Computer Method to estimate dose. (2) Use Manual Method to determine deposition concentration. |
| Field survey - I-131 or concentration        | EP 316 to estimate thyroid dose commitment rate.  |
| Liquid Release data                          | EP 318 and/or EP 319 as necessary.  |

General Notes:

1. Dose Model is primary calculation method when in operation.
2. EP 316 "Rapid" calculations are conservative and assume normal flow conditions, predetermined windspeeds and turbulence classes.

Appendix EP-210-2  
CONTACTING RADIATION MANAGEMENT CORPORATION

Phone Number 

This is       (Name)       representing the Dose Assessment Team  
of the Peach Bottom Atomic Power Station.

There has been a release of radioactive material from the Unit  
(2), (3) plant and your assistance is required in the following areas:

       Radiation Surveys (       Low Level        High Level)

- BETA
- GAMA
- NEUTRON

       Decontamination (       ALPHA,        BETA,        GAMMA)

       Environmental sample analysis

       Air particulate samples collection/evaluation

       Bioassay

       Wholebody counting

       Other (Specify below)

Approach the site from       (direction, route, etc.)      .  
Respiratory protection (is/is not) necessary.  
Anti-contamination clothing requirements are:

- full
- partial (booties, gloves,        other)

Additional comments:

---

---

---

---

---



CONTROLLED APPROVED COPY-  
VOID PREVIOUS ISSUE  
DISTRIBUTION PER A-2

*[Handwritten Signature]*  
9-15-84

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 & 3  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-307 RECEPTION AND ORIENTATION OF SUPPORT PERSONNEL

PURPOSE:

This procedure defines the actions to be taken to receive and orientate those support personnel who will be coming onsite in the event of an emergency at the Peach Bottom Atomic Power Station.

REFERENCES:

1. Peach Bottom Atomic Power Station Emergency Plan

| <u>Section</u> | <u>Title</u>                         |
|----------------|--------------------------------------|
| 5.3.1.3        | Support Personnel Procurement Group  |
| 5.3.1.4        | Western Division Accomodations Group |

APPENDICES:

- EP-307-1 Support Personnel Security Log
- EP-307-2 Support Personnel Dosimetry Issuance Log
- EP-307-3 General Employee Training, General Respiratory Training, and Respiratory Fit Test Attendance Sheet

ACTION LEVEL:

This procedure will be implemented when the arrival of offsite support personnel requested by the Philadelphia Electric Company is anticipated. Normal notification of arrival will be from the Peach Bottom Security or Corporate Headquarters to the Site Emergency Coordinator.

PRECAUTIONS:

1. Ensure that all support personnel initially report to the President's Utility Building (PUB) to obtain the appropriate security badge, dosimetry, training and work assignments.



IMMEDIATE ACTIONS:

- 1.0 Site Emergency Coordinator shall:
  - 1.1 Inform the Planning Coordinator to handle all incoming support personnel to ensure that these people are properly indoctrinated and trained in their function at the site.
- 2.0 Planning Coordinator shall:
  - 2.1 Direct the Security Team Leader to assign a Security Team Member to report to the President's Utility Building (PUB).
  - 2.2 Direct the Personnel Safety Team Leader to assign a personnel dosimetry, bioassay, respiratory protection group member to report to the President's Utility Building (PUB).
  - 2.3 Direct the designated training personnel to report to the President's Utility Building (PUB).
- 3.0 Security Team Member shall:
  - 3.1 Obtain an adequate supply of temporary security badges from the Security Building.
  - 3.2 Proceed to the President's Utility Building (PUB) when directed to do so by the Security Supervisor.
  - 3.3 Commence follow-up actions upon arrival of support personnel.
- 4.0 Personnel Dosimetry, Bioassay, and Respiratory Protection Team Member shall:
  - 4.1 Obtain an adequate supply of dosimetry devices from the Dosimetry Office in the Security Building.
  - 4.2 Proceed to the President's Utility Building (PUB) when directed to do so by the Personnel Safety Team Leader.
  - 4.3 Commence follow-up actions upon arrival of support personnel.
- 5.0 Designated Training Personnel shall:
  - 5.1 Proceed to the President's Utility Building (PUB) when directed to do so by the Planning Coordinator.
  - 5.2 Commence follow-up actions upon arrival of support personnel.

FOLLOW-UP ACTIONS:

1.0 Security Team Member shall:

- 1.1 Direct arriving support personnel to fill out the appropriate sections of Appendix EP-307-1, Support Personnel Security Log.
- 1.2 Issue each of the support personnel a temporary security badge. (This may require personnel to go to the Unit 2 and 3 Main Guard House.)

2.0 Personnel Dosimetry, Bioassay, Respiratory Protection Team Member shall:

- 2.1 Direct arriving Support Personnel to fill out the appropriate sections of Appendix EP-307-2, Support Personnel Dosimetry Issuance Log. (Ensure that all support personnel provide Visitor History Record and Occupational External Radiation Exposure History Information prior to issuance of dosimetry.)
- 2.2 Issue each of the support personnel the appropriate dosimetric devices (as directed by the Personnel Safety Team Leader).
- 2.3 Ensure each person understands the principle behind the use of the KI tablets and the fact that they may be required to utilize this radio-protective drug should radioiodine levels reach greater than 10 rem in their environment.

3.0 Designated Training Personnel shall:

- 3.1 Request from the Support Personnel Accommodations Coordinator through the Planning Coordinator the following information:
  - 3.1.1 Approximate number of support personnel expected.
  - 3.1.2 Arrangements for hotels and meals.
- 3.2 Request from the Planning Coordinator information regarding the Team or Staff the Support Personnel are to report to.
- 3.3 Request from the Planning Coordinator information regarding the Plant status.
- 3.4 Assemble personnel in the classroom and provide them with the following information:
  - 3.4.1 Basic description of the Plant status
  - 3.4.2 Work shift hours they will be assigned to
  - 3.4.3 Arrangements for hotels and meals
  - 3.4.4 Person they are to report to

- 3.5 With the same group conduct a General Employee Training Class. Also, if necessary, conduct a General Respiratory Training Class and Respiratory Fit Test.

NOTE: Appendix EP-307-3, General Employee Training, General Respiratory Training, and Respiratory Fit Attendance Sheet must be filled out in order to document all training.

- 3.6 Contact appropriate station personnel assigned the responsibility for supervising the support personnel, request authorization to release personnel to these station personnel and have them meet the support personnel at the entrance of the Security Building.
- 3.7 Release support personnel if authorization is received. Log the name of the PECO "Supervisor" who is responsible for these support personnel on Appendix EP-307-1, Support Personnel Security Log.

4.0 Planning Coordinator shall:

- 4.1 Inform the Site Emergency Coordinator when the designated support personnel have been properly indoctrinated and trained and are ready for work in the plant or on the site.

APPENDIX 307-1

SUPPORT PERSONNEL SECURITY LOG

PBAPS

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM ATOMIC POWER STATION

MO \_\_\_\_\_ DAY \_\_\_\_\_ YEAR \_\_\_\_\_  
SECURITY TEAM MEMBER \_\_\_\_\_

| NAME<br>a. WRITTEN SIGNATURE<br>b. PRINT NAME - LAST, FIRST, MI | Jr.<br>or<br>Sr. | SOCIAL SECURITY NO. | BIRTH DATE<br>(MTH/DATE/YR) | PECO P/R NO. or<br>CONTRACTOR | VISITOR<br>HISTORY<br>RECORD<br>IF<br>necessary | *<br>SUPERVISOR TO WHOM<br>YOU ARE TO REPORT TO |
|---|------------------|---------------------|-----------------------------|-------------------------------|---|---|
| a. _____  |                  |                     |                             |                               |   |   |
| b. _____  |                  |                     |                             |                               |   |   |
| a. _____  |                  |                     |                             |                               |   |   |
| b. _____  |                  |                     |                             |                               |   |   |
| a. _____  |                  |                     |                             |                               |   |   |
| b. _____  |                  |                     |                             |                               |   |   |
| a. _____  |                  |                     |                             |                               |   |   |
| b. _____  |                  |                     |                             |                               |   |   |
| a. _____  |                  |                     |                             |                               |   |   |
| b. _____  |                  |                     |                             |                               |   |   |
| a. _____  |                  |                     |                             |                               |   |   |
| b. _____  |                  |                     |                             |                               |   |   |
| a. _____  |                  |                     |                             |                               |   |   |
| b. _____  |                  |                     |                             |                               |   |   |
| a. _____  |                  |                     |                             |                               |   |   |
| b. _____  |                  |                     |                             |                               |   |   |

Will be necessary for personnel who are NOT Philadelphia Electric Company Employees to fill out this form



APPENDIX 307-2

SUPPORT PERSONNEL DOSIMETRY ISSUANCE LOG

PBAPS

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM ATOMIC POWER STATION

MO \_\_\_\_\_ DAY \_\_\_\_\_ YEAR \_\_\_\_\_

PERSONNEL DOSIMETRY GROUND MEMBER

| NAME                 |                                 | Jr.<br>or<br>Sr | SOCIAL<br>SECURITY<br>NUMBER | BIRTH DATE<br>(MM/DD/YY) | PECO P/R NO.<br>Or Contractor | NRC FORM 4 | * Request for<br>previous<br>occupational<br>Radiation<br>Exposure | SUPERVISOR TO WHOM<br>YOU ARE TO REPORT TO |
|----------------------|---------------------------------|-----------------|------------------------------|--------------------------|-------------------------------|------------|--|--|
| a. WRITTEN SIGNATURE | b. PRINT NAME - LAST, FIRST, MI |                 |                              |                          |                               |            |  |  |
| a.                   |                                 |                 |                              |                          |                               |            |  |  |
| b.                   |                                 |                 |                              |                          |                               |            |  |  |
| a.                   |                                 |                 |                              |                          |                               |            |  |  |
| b.                   |                                 |                 |                              |                          |                               |            |  |  |
| a.                   |                                 |                 |                              |                          |                               |            |  |  |
| b.                   |                                 |                 |                              |                          |                               |            |  |  |
| a.                   |                                 |                 |                              |                          |                               |            |  |  |
| b.                   |                                 |                 |                              |                          |                               |            |  |  |
| a.                   |                                 |                 |                              |                          |                               |            |  |  |
| b.                   |                                 |                 |                              |                          |                               |            |  |  |
| a.                   |                                 |                 |                              |                          |                               |            |  |  |
| b.                   |                                 |                 |                              |                          |                               |            |  |  |
| a.                   |                                 |                 |                              |                          |                               |            |  |  |
| b.                   |                                 |                 |                              |                          |                               |            |  |  |
| a.                   |                                 |                 |                              |                          |                               |            |  |  |
| b.                   |                                 |                 |                              |                          |                               |            |  |  |
| a.                   |                                 |                 |                              |                          |                               |            |  |  |
| b.                   |                                 |                 |                              |                          |                               |            |  |  |

\* Will be necessary for personnel who are NOT Philadelphia...





APPENDIX 307-3

GENERAL EMPLOYEE TRAINING, GENERAL RESPIRATORY TRAINING, AND

RESPIRATORY FIT TEST ATTENDANCE SHEET

RESPIRATORY EQUIPMENT TRAINING RECORD

| DATE _____ |                              | OTHER - (SPECIFY)                |     |       |     |     |
|------------|------------------------------|----------------------------------|-----|-------|-----|-----|
| NAME       |                              | PECO P/R # or NAME of CONTRACTOR | GRT | DRILL | CVT | UVT |
| a.         | WRITTEN SIGNATURE            |                                  |     |       |     |     |
| b.         | PRINT NAME - LAST, FIRST, MI |                                  |     |       |     |     |
| a.         | _____                        |                                  |     |       |     |     |
| b.         | _____                        |                                  |     |       |     |     |
| a.         | _____                        |                                  |     |       |     |     |
| b.         | _____                        |                                  |     |       |     |     |
| a.         | _____                        |                                  |     |       |     |     |
| b.         | _____                        |                                  |     |       |     |     |
| a.         | _____                        |                                  |     |       |     |     |
| b.         | _____                        |                                  |     |       |     |     |
| a.         | _____                        |                                  |     |       |     |     |
| b.         | _____                        |                                  |     |       |     |     |

*W. Smith*  
9-20-84

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-312 RADIOACTIVE LIQUID RELEASE (EMERGENCY DIRECTOR FUNCTIONS)

PURPOSE:

To prescribe the actions of the Emergency Director in the event of an excessive radioactive liquid release. The Site Emergency Coordinator shall assume these responsibilities upon activation of the Emergency Operations Facility.

REFERENCES:

Emergency Plan, Sec. 6 (Emergency Measures)  
EP-209, Appendix J  
EP-318  
EP-319

APPENDICES:

None

ACTION LEVELS:

An excessive radioactive liquid release occurs, as indicated by:

1. The Radwaste Effluent radiation recorder at the discharge to Conowingo Pond indicates a release rate of 500 times the maximum permissible concentration which is  $5 \times 10^{-5}$  uCi/cc for an unidentified isotope.
2. Sample measurements at the discharge structure indicate 500 times maximum permissible concentration which is  $5 \times 10^{-5}$  uCi/cc for an unidentified isotope.

PROCEDURE:

Immediate Actions:

1. The Shift Superintendent (or alternately, the Shift Supervisor) shall:
  - a. Assume the role of Interim Emergency Director and carry out the steps of EP-101 to classify the event. Depending on the classification of the emergency, carry out the steps of EP-104 or 105.

- b. Take immediate steps to terminate the discharge and contain the hazard.
- c. Direct the Chemistry Sampling and Analysis Team to report to the discharge structure to obtain and analyze water samples.
- d. Direct the Dose Assessment Team Leader to calculate the activity released and the resulting downstream concentrations, using EP-318 and 319 Dose Projections.

BE PREPARED TO NOTIFY DOWNSTREAM DOMESTIC WATER USERS IF REQUESTED TO DO SO BY THE BUREAU OF RADIATION PROTECTION - (see EP-209 App J)

FOLLOW-UP ACTIONS:

1. The Interim Emergency Director or Emergency Director shall direct continued surveillance of the discharge structure equipment and initiate required decontamination efforts as soon as possible.
2. The Site Emergency Coordinator shall:
  - a. Direct the Chemistry Sampling and Analysis Team Leader to dispatch survey teams to obtain water samples off-site, primarily at the following downstream public water system intakes:
    - (1) Chester Water Authority
    - (2) Baltimore Water Supply Bureau
    - (3) Conowingo Village
    - (4) Bainbridge Naval Training Center/Port Deposit
    - (5) Perry Point Veteran's Hospital
    - (6) Havre-de-Grace
    - (7) Perryville
  - b. Direct that a log be kept to indicate the time of samples and measured radioactive concentrations at appropriate locations along the pond, including all public water system intakes.
  - c. Direct the Dose Assessment Team Leader to calculate the estimated time of maximum radioactive concentrations at various public water system intakes using EP-318.
  - d. Direct the Emergency Operations Facility Communicator to notify downstream domestic water users if requested to do so by the Bureau of Radiation Protection (see EP-209, Appendix J).

CONTROLLED APPROVED COPY  
VOID PREVIOUS ISSUE  
DISTRIBUTION PER A-2

EP-313  
Page 1 of 6, Rev. 1  
RLG:clb

*RLG*  
9-20-84

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 & 3

EMERGENCY PLAN IMPLEMENTATION PROCEDURE

EP-313 CONTROL OF THYROID BLOCKING (KI) TABLETS

PURPOSE:

To provide guidelines and instructions for the administration of potassium iodide (KI) to on-site personnel for use as a thyroid blocking agent to provide protection against airborne radioiodine.

REFERENCES:

1. Peach Bottom Atomic Power Station Emergency Plan

Section

Title

6.4.2.3

Use for Preparation of Radio-Protective Drugs

2. NUREG 0654

Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

APPENDICES:

- EP-313-1 Graph of I-131 concentration vs. in-plant personnel stay time.
- EP-313-2 Graph of I-131 concentration vs. off-site personnel stay time.
- EP-313-3 KI Administration Record Form.

ACTION LEVEL:

KI is administered when the calculated actual or potential thyroid absorbed dose is equal to or greater than 10 rem.

PRECAUTIONS:

1. The taking of KI tablets is strictly voluntary for each individual involved. However, once administered, dosage should be 100 mg/day for 10 consecutive days.
2. Personnel having allergic reactions to iodine should be administered KI only after risks of iodine accumulating in the thyroid vs. possible side effects due to KI are weighed.
3. Prior to administering KI, the Personnel Safety Team Leader shall ensure that the shelf life of KI tablets to be used has not been exceeded (shelf life of KI tablets is approximately 2 years).



4. All persons using KI as a thyroid-blocking agent in a radiation accident should be familiar with the possible following side effects:
- a. skin rashes
  - b. swelling of parotid glands ("iodide mumps")
  - c. metallic taste in mouth
  - d. burning mouth and throat
  - e. sore teeth and gums
  - f. rashes
  - g. symptoms of a head cold
  - h. gastric upset, and
  - i. diarrhea

IMMEDIATE ACTIONS:

1.0 Personnel Safety Team Leader or Interim shall:

1.1 Determine the need for administering KI as follows:

- a. Determine the I-131 airborne concentration ( $\mu\text{Ci/cc}$ ) in the affected area(s) by using the Eberline SAM-2.
- b. Divide the I-131 concentration by the protection factor of respiratory equipment, if applicable:

| <u>Respirator Type</u>              | <u>Protection Factor (PF)</u> |
|-------------------------------------|-------------------------------|
| Air purifying (face piece, full)    | 50                            |
| Atmos. supplying (face piece, full) | 2,000                         |
| SCBA (face piece, full)             | 10,000                        |

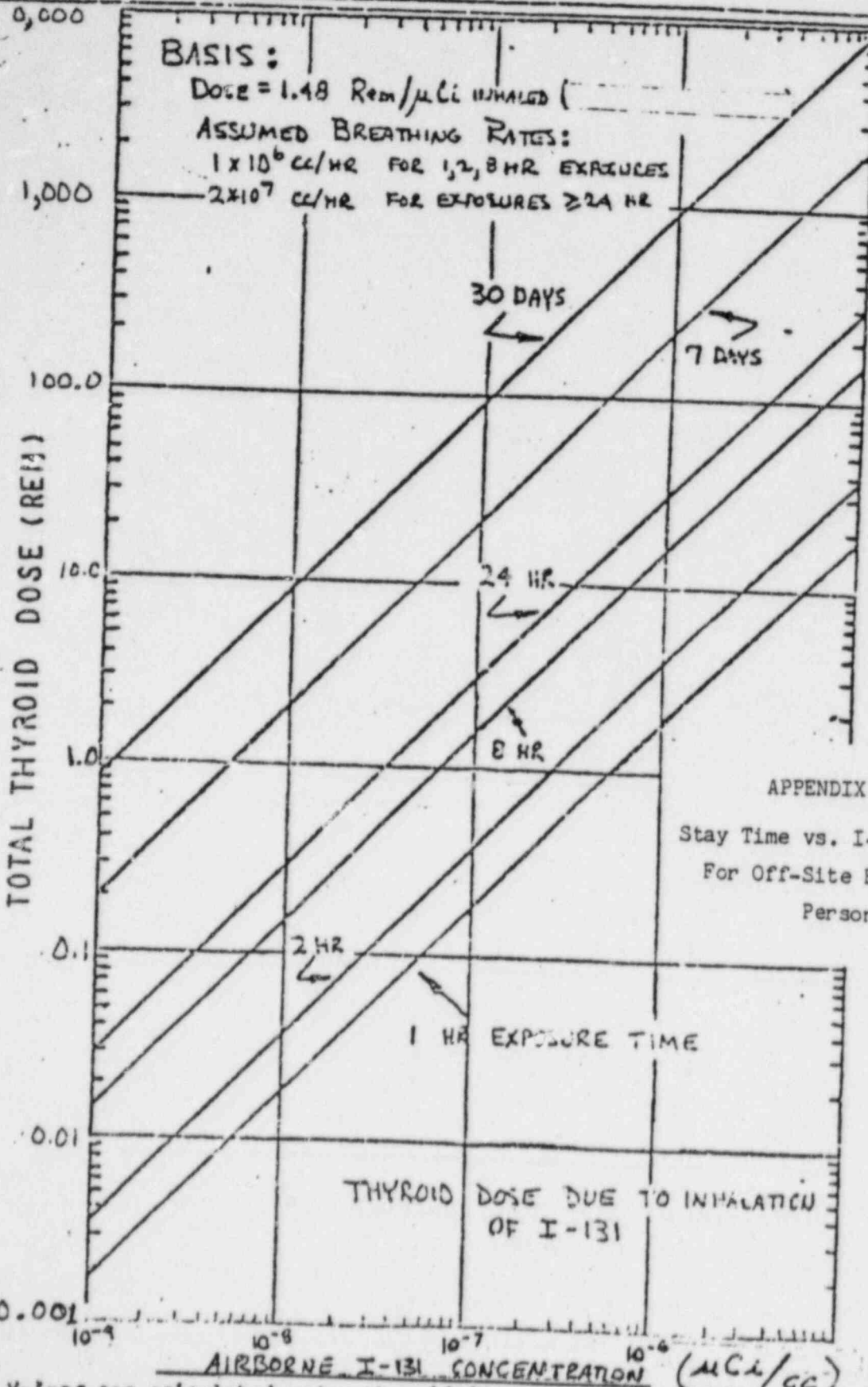
- c. Determine the stay time (in minutes) of the individuals in the affected area.
  - d. Locate the intersection of these points on the appropriate graph of I-131 concentration vs. stay time (Appendix EP-313-1 for in-plant personnel and Appendix EP-313-2 for off-site personnel involved in field monitoring).
  - e. If the projected dose is equal to or greater than 10 rem, KI administration is recommended.
- 1.2 Discuss need for KI with Emergency Director to obtain concurrence prior to administration of tablets.
- 1.3 Inform HP&C Coordinator at the HP&C Operations Support Center (on 116' elev. turbine bldg.) to assemble affected or intended people to receive KI in the Medical Room in the Radwaste Building at elev. 135' for tablet distribution.
- 1.4 Ensure that personnel who have been exposed to radioiodine thyroid dose of 10 rem or greater receive the first KI tablet (130 mg) within 2 hours of such exposure. Additionally, ensure that these people re-

ceive tablets daily for at least three but not more than 10 consecutive days after exposure. Consult PECO. Medical Director for further guidance if necessary.

- 2.0 HP&C Operations Support Center Coordinator shall:
  - 2.1 Assemble those personnel who are to receive KI as directed by the Personnel Safety Team Leader.
  - 2.2 Ask personnel if they are known to have allergic reactions to iodine. If no reaction is known, advise all individuals that taking KI is strictly voluntary. If a person does have an allergy to iodine, discuss this situation with the person involved and Personnel Safety Team Leader to ensure a full understanding of risks of not administering KI vs. the side effects which may occur if taken.
  - 2.3 Administer KI tablets (one 130 mg tablet each) to all intended personnel from tablet supply in Radwaste Building medical room on elev. 135' radwaste building. Log each person's name, social security no. or payroll no., company/dept., and date on the KI administration record form (see Appendix EP-313-3).
  - 2.4 Upon completion of the administration of KI, report the names of the people who received KI to the Personnel Safety Team Leader.

FOLLOW-UP ACTIONS:

- 1.0 Radiation Protection Team Leader or Interim shall:
  - 1.1 Notify the PECO. Medical Director and Emergency Director of all persons who received KI.
  - 1.2 Ensure that KI is administered daily to each person on the form until the accumulated dose is 1 gm of iodide or as otherwise directed by the PECO. Medical Director. The time required to accumulate 1 gm of iodide is 10 days.



- (1) Values are calculated using the old dose conversion for I-131. The new constant in the reference is  $1.5 \times 10^6$ . However, the old conversion,  $1.8 \times 10^6$ , is used for conservatism.
- (2) To approximate the child (6 months to one year worst case) thyroid dose from the adult dose multiply it by a factor of 2.



*RLG:mdw*  
9-20-84

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-316 CUMULATIVE POPULATION DOSE CALCULATIONS

PURPOSE

To provide methods of estimating the site boundary and offsite airborne concentrations and resulting whole body doses and/or thyroid doses when the Corporate Computer Dose Model is unavailable.

REFERENCE:

1. Peach Bottom Atomic Power Station Emergency Plan

| <u>Section</u> | <u>Title</u>  |
|----------------|---|
| 5.2.2.2.1.C    | Radiation Protection Team - Dose Assessment                               |
| 6.2.1          | Assessment methods for determining magnitude of release to the atmosphere |
| 6.2.3          | Population Exposure Estimates   |
2. 10 CFR20, Appendix B
3. NUREG 0654 Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants
4. EP-103 Alert Immediate Actions
5. EP-104 Site Emergency Immediate Actions
6. EP-105 General Emergency Immediate Actions
8. EP-205A Chemistry Sampling and Analysis Team
9. EP-210 Dose Assessment Group
10. EP-317 Determination of Protective Action Recommendations
11. EP-325 Methodology for Using the Containment Radiation Monitor to Estimate Source Term Available for Release
12. EP-315 Corporate Computer Dose Calculations
13. EP-316 History File



### ACTION LEVEL

An alert or higher level emergency has been declared in accordance with EP-101, "Classification of Emergencies".

### PRECAUTIONS

Calculations performed in this procedure should be checked by an independent reviewer. Calculation results should be verified as soon as practicable by plant survey squads (within security fence) or field survey squads (outside security fence).

### IMMEDIATE ACTIONS

#### 1. Shift Supervision shall:

- 1.1 Perform the following steps until qualified dose assessment personnel are available.
- 1.2 Contact the Chemistry Sampling & Analysis Team Leader and direct him to have the Chemistry Sampling and Analysis Group collect and analyze appropriate gas, iodine, and particulate samples from the Main Stack and/or Roof Vents in accordance with EP-205A.7.-Obtaining the iodine and particulate sample from the Main Stack and Roof Vents following accident conditions.
- 1.3 Direct the Chemistry Sampling, & Annalysis Team Leader to provide the sample analysis results to the individual performing these calculations as soon as results are available.
- 1.4 Perform the RAPID assessment calculations in Section 1 and/ or 2 of this procedure and determine the HIGHEST offsite whole body and thyroid dose.
- 1.5 Record the results on the Rapid Input Data Sheet for EP-317 (Worksheet 13 Appendix A) and forward that sheet to the Emergency Director for performing EP-317 Determination of Protective Action Recommendations.
- 1.6 Continue to perform Steps 1.4 and 1.5 during and after the release until qualified dose assessment personnel are available.

#### 2. Dose Assessment Team shall:

- 2.1 Perform the Rapid assessment calculations in Section 1 and/ or 2 of this procedure and determine the HIGHEST offsite whole body and thyroid dose.
- 2.2 Record the results on the Rapid Input Data Sheet for EP-317 (Worksheet 13 Appendix A) and forward that sheet to the Emergency Director for performing EP-317, Determination of Protective Recommendations.
- 2.3 Perform the REFINED whole body and thyroid dose calculations in Section 3 of this procedure and determine the highest offsite whole body and thyroid dose.

- 2.4 Record the results on the Refined Input Data Sheet for EP-317 (Worksheet 12 Appendix A) and forward that sheet to the Emergency Director.
- 2.5 Continue to perform the above steps as new data becomes available, until you are relieved of this duty or until you are instructed that these calculations are no longer required.

EP 316 INDEX

Section 1. Rapid Assessment Using Worst Case Meteorology

- 1.A Highest Offsite Whole Body Dose
- 1.B Highest Offsite Thyroid Dose

Section 2. Rapid Assessment Using Actual Meteorology

- 2.A Highest Offsite Whole Body Dose
- 2.B Highest Offsite Thyroid Dose

Section 3. Refined Assessment of Noble Gas and Radioiodine Releases

- 3.1 Plume Centerline Whole Body Doses based on the Assessment of Noble Gas Releases from the Normal Range Monitors
  - 3.1A. Known Isotopic Breakdown
  - 3.1B. Unknown Isotopic Breakdown
- 3.2 Plume Centerline Whole Body Doses based on the Assessment of the Radioiodine Releases from the High Range Monitor
  - 3.2A. Known Isotopic Breakdown
  - 3.2B. Unknown Isotopic Breakdown
- 3.3 Off-Plume Centerline Whole Body Doses
- 3.4 Plume Centerline Thyroid Doses based on the Assessment of Radioiodine Releases from the Normal Range Monitors
  - 3.4A. Known Isotopic Breakdown
  - 3.4B. Unknown Isotopic Breakdown
- 3.5 Plume Centerline Thyroid Doses based on the Assessment of Radioiodine Releases from the High Range Monitor
  - 3.5A. Known Isotopic Breakdown
  - 3.5B. Unknown Isotopic Breakdown
- 3.6 Off-Plume Centerline Thyroid Doses
- 3.7 Thyroid Dose Rates from Field Survey Data
- 3.8 Ground Deposition Concentrations

3.8A. Plume Centerline Offsite Ground Deposition  
Concentrations

3.8B. Off-Plume Centerline Offsite Ground Deposition  
Concentrations

3.9 Plume Travel Time

Appendix A: Worksheets

Appendix B: Count Rate Conversion Graphs

Graph #1: Main Stack Normal Range Monitor

Graph #2: Roof Vents Normal Range Monitors

Graph #3: Main Stack High Range Monitor

Graph #4: Roof Vents High Range Monitor

Appendix C: Table of Contents for the Relative Dispersion Factors (X/Q)

Appendix D: Dispersion Factors (X/Q)

Appendix E: Isotopic Abundance vs. Decay Time Since the Reactor Shutdown

Appendix F: Population Distribution



SECTION 1: RAPID ASSESSMENT USING WORST CASE METEOROLOGY

1.A HIGHEST OFFSITE WHOLE BODY DOSE

USE THE NORMAL RADIATION MONITOR (RR-2(3)979 FOR THE ROOF VENTS AND RR-0-17-051 FOR THE MAIN STACK) FOR ALL CALCULATIONS UNLESS READINGS ARE OFFSCALE. IF THE NORMAL RANGE MONITOR IS OFFSCALE, USE THE HIGH RANGE MONITOR (RR-7127) FOR CALCULATIONS.

- |   | <u>MS</u> | <u>RV2</u> | <u>RV3</u> |
|---|-----------|------------|------------|
| 1. Indicate the point(s) of release.  | _____     | _____      | _____      |
| 2. Record the peak count rate.  | _____ cps | _____ cpm  | _____ cpm  |
| 3. Record the flow rate.  | _____ cfm | _____ cfm  | _____ cfm  |
| 4. Using the count rate from Step 2 and the flow rate from Step 3, perform the following appropriate calculation: |           |            |            |

Main Stack Release

|                 | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Whole Body<br>Dose          |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  |   | $9.81 \times 10^{-5}$     | or | $1.38 \times 10^{-5}$   | = | _____ mrem<br>at 5.00 miles |
| 15,000 CFM:     | _____ cps  |   | $1.42 \times 10^{-4}$     | or | $2.00 \times 10^{-5}$   | = | _____ mrem<br>at 5.00 miles |
| 20,000 CFM:     | _____ cps  |   | $1.77 \times 10^{-4}$     | or | $2.49 \times 10^{-5}$   | = | _____ mrem<br>at 5.00 miles |
| 30,000 CFM:     | _____ cps  |   | $1.61 \times 10^{-4}$     | or | $2.26 \times 10^{-5}$   | = | _____ mrem<br>at 5.00 miles |

Roof Vent Release

|                  | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Whole Body<br>Dose  |
|------------------|------------|---|---------------------------|----|-------------------------|---|---------------------|
| For 100,000 CFM: | _____ cpm  | x | 1.52 x 10 <sup>-5</sup>   | or | 2.30 x 10 <sup>-8</sup> | = | _____ at 1.50 miles |
| 200,000 CFM:     | _____ cpm  | x | 2.86 x 10 <sup>-5</sup>   | or | 4.32 x 10 <sup>-8</sup> | = | _____ at 1.50 miles |
| 300,000 CFM:     | _____ cpm  | x | 3.72 x 10 <sup>-5</sup>   | or | 5.61 x 10 <sup>-8</sup> | = | _____ at 1.50 miles |
| 400,000 CFM:     | _____ cpm  | x | 2.40 x 10 <sup>-5</sup>   |    | 3.63 x 10 <sup>-8</sup> | = | _____ at 1.50 miles |

THIS DOSE IS THE HIGHEST OFFSITE WHOLE BODY DOSE DUE TO A MAIN STACK OR ROOF VENT RELEASE UNDER STABLE METEOROLOGICAL CONDITIONS, USING THE ISOTOPIC ABUNDANCE PRESENT AT 2.50 HOURS AFTER THE REACTOR SHUTDOWN.

1.B HIGHEST OFFSITE THYROID DOSE

USE THE COUNT RATE AND FLOW RATE FROM SECTION 1.A FOR THE FOLLOWING CALCULATIONS:

Main Stack Release

1. Calculate the inhalation and ingestion doses.

Inhalation

|                 | Flow Rate: | Count Rate | x                       | Normal<br>Range<br>Factor | or                      | High<br>Range<br>Factor | =                        | Inhalation<br>Dose |
|-----------------|------------|------------|-------------------------|---------------------------|-------------------------|-------------------------|--------------------------|--------------------|
| For 10,000 CFM: | _____ cps  | x          | 1.04 x 10 <sup>-3</sup> | or                        | 1.45 x 10 <sup>-4</sup> | =                       | _____ mrem at 5.00 miles |                    |
| 15,000 CFM:     | _____ cps  | x          | 1.50 x 10 <sup>-3</sup> | or                        | 2.11 x 10 <sup>-4</sup> | =                       | _____ mrem at 5.00 miles |                    |
| 20,000 CFM:     | _____ cps  | x          | 1.87 x 10 <sup>-3</sup> | or                        | 2.63 x 10 <sup>-4</sup> | =                       | _____ mrem at 5.00 miles |                    |
| 30,000 CFM:     | _____ cps  | x          | 1.70 x 10 <sup>-3</sup> | or                        | 2.39 x 10 <sup>-4</sup> | =                       | _____ mrem at 5.00 miles |                    |

THE INGESTION CALCULATION IS ONLY NECESSARY FOR PASTURE FEEDING PERIOD OF APRIL THROUGH NOVEMBER. INGESTION DOSE FOR DECEMBER TO MARCH SHALL BE ZERO.

Ingestion

| Flow Rate:      | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Ingestion<br>Dose           |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  | x | 7.40 x 10 <sup>-1</sup>   | or | 1.04 x 10 <sup>-1</sup> | = | _____ mrem<br>at 5.00 miles |
| 15,000 CFM:     | _____ cps  | x | 1.07                      | or | 1.51 x 10 <sup>-1</sup> | = | _____ mrem<br>at 5.00 miles |
| 20,000 CFM:     | _____ cps  | x | 1.34                      | or | 1.88 x 10 <sup>-1</sup> | = | _____ mrem<br>at 5.00 miles |
| 30,000 CFM:     | _____ cps  | x | 1.22                      | or | 1.71 x 10 <sup>-1</sup> | = | _____ mrem<br>at 5.00 miles |

2. Add the inhalation and ingestion doses to obtain a total thyroid (iodine) dose.

Inhalation dose + ingestion dose = thyroid dose

\_\_\_\_\_ mrem + \_\_\_\_\_ mrem = \_\_\_\_\_ mrem at 5.00 miles

THIS DOSE IS THE HIGHEST OFFSITE THYROID DOSE DUE TO A MAIN STACK RELEASE UNDER STABLE METEOROLOGICAL CONDITIONS, USING 100% I-131 DOSE CONVERSION FACTOR.

Roof Vent Release

1. Calculate the inhalation and ingestion doses.

Inhalation

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Inhalation<br>Dose          |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | 1.23 x 10 <sup>-2</sup>   | or | 1.85 x 10 <sup>-5</sup> | = | _____ mrem<br>at 1.50 miles |
| 200,000 CFM:     | _____ cpm  | x | 2.30 x 10 <sup>-2</sup>   | or | 3.47 x 10 <sup>-5</sup> | = | _____ mrem<br>at 1.50 miles |
| 300,000 CFM:     | _____ cpm  | x | 2.99 x 10 <sup>-2</sup>   | or | 4.51 x 10 <sup>-5</sup> | = | _____ mrem<br>at 1.50 miles |
| 400,000 CFM:     | _____ cpm  | x | 1.93 x 10 <sup>-2</sup>   | or | 2.91 x 10 <sup>-5</sup> | = | _____ mrem<br>at 1.50 miles |

THE INGESTION CALCULATION IS ONLY NECESSARY FOR PASTURE FEEDING PERIOD OF APRIL THROUGH NOVEMBER. INGESTION DOSE FOR DECEMBER TO MARCH SHALL BE ZERO.

Ingestion

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Ingestion<br>Dose           |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | 8.77                      | or | 1.32 x 10 <sup>-2</sup> | = | _____ mrem<br>at 1.50 miles |
| 200,000 CFM:     | _____ cpm  | x | 1.64 x 10 <sup>1</sup>    | or | 2.48 x 10 <sup>-2</sup> | = | _____ mrem<br>at 1.50 miles |
| 300,000 CFM:     | _____ cpm  | x | 2.14 x 10 <sup>1</sup>    | or | 3.23 x 10 <sup>-2</sup> | = | _____ mrem<br>at 1.50 miles |
| 400,000 CFM:     | _____ cpm  | x | 1.38 x 10 <sup>1</sup>    | or | 2.09 x 10 <sup>-2</sup> | = | _____ mrem<br>at 1.50 miles |

2. Add the inhalation and ingestion doses to obtain a total thyroid (iodine) dose.

Inhalation dose + ingestion dose = thyroid dose

\_\_\_\_\_ mrem + \_\_\_\_\_ mrem = \_\_\_\_\_ mrem at 1.50 miles

THIS DOSE IS THE HIGHEST OFFSITE THYROID DOSE DUE TO A ROOF VENT  
RELEASE UNDER STABLE METEOROLOGICAL CONDITIONS, USING 100% I-131  
DOSE CONVERSION FACTOR.



SECTION 2: RAPID ASSESSMENT ACTUAL METEOROLOGY

2.A HIGHEST OFFSITE WHOLE BODY DOSE

USE THE NORMAL RADIATION MONITOR (RR-2(3)979 FOR THE ROOF VENTS AND RR-0-17-051 FOR THE MAIN STACK) FOR ALL CALCULATIONS UNLESS READINGS ARE OFFSCALE. IF THE NORMAL RANGE MONITOR IS OFFSCALE, USE THE HIGH RANGE MONITOR (RR-7127) FOR CALCULATIONS.

- |   | <u>MS</u> | <u>RV2</u> | <u>RV3</u> |
|---|-----------|------------|------------|
| 1. Indicate the point(s) of release.  | _____     | _____      | _____      |
| 2. Record the average (20 mins.) count rate                                   | _____ cps | _____ cpm  | _____ cpm  |
| 3. Record the flow rate.  | _____ cfm | _____ cfm  | _____ cfm  |
| 4. Record the average (20 mins.) wind speed for the time interval of release: |           |            |            |

Main Stack Release

- 1 - 320' (Tower 2) 3-cup anemometer reading \_\_\_\_\_ mph

If the 320' (Tower 2) reading is unavailable, use one of the following stations:

- 2 - 330' Aerovane reading \_\_\_\_\_ mph  
○  
3 - 75' (Tower 2) 3-cup anemometer reading \_\_\_\_\_ mph  
○  
4 - 90' (Tower 1A) 3-cup anemometer reading \_\_\_\_\_ mph  
○  
5 - 33' (Hill Pole) 3-cup anemometer reading \_\_\_\_\_ mph

Roof Vent Release

- 1 - 75' (Tower 2) 3-cup anemometer reading \_\_\_\_\_ mph

If the 75' (Tower 2) reading is unavailable, use one of the following stations:

- 2 - 320' (Tower 2) 3-cup anemometer reading \_\_\_\_\_ mph  
○  
3 - 330' Aerovane reading \_\_\_\_\_ mph  
○  
4 - 90' (Tower 1A) 3-cup anemometer reading \_\_\_\_\_ mph  
○  
5 - 33' (Hill Pole) 3-cup anemometer reading \_\_\_\_\_ mph

5. Determine and record the stability class.

If 320' (Tower 2) 3-cup anemometer windspeed  $\geq$  18 mph  
or 75' (Tower 2) 3-cup anemometer windspeed  $\geq$  12 mph  
the stability class is NEUTRAL.

If below the above windspeed, the stability class is determined  
by the following:

- 1 - If 316' temperature - 30' temperature = positive  
The stability class is STABLE
- 1 - If 316' temperature - 30' temperature = negative  
The stability class is UNSTABLE

If the 316' temperature reading is unavailable, use one of the following:

- 2 - If 150' temperature - 30' temperature
- 3 - If 90' temperature - 30' temperature

Stability class \_\_\_\_\_

6. Determine and record the direction which the wind is blowing  
TOWARDS by adding 180 degrees to the average wind direction from  
the recorder. If the wind direction from the recorder is greater  
than 180 degrees, subtract 180 degrees.

If less than 180 degrees: \_\_\_\_\_ mph + 180 degrees = towards \_\_\_\_\_ mph  
If greater than 180 degrees: \_\_\_\_\_ mph - 180 degrees = towards \_\_\_\_\_ mph

REFER TO APPENDIX F FOR DETERMINING THE SECTOR WHICH THE WIND BLOWING  
TOWARDS.

7. Perform the appropriate calculation based on the stability class  
determined in Step 5, using the count rate from Step 2 and the  
flow rate from Step 3.

Main Stack Releases

Stable Conditions

| Flow Rate:      | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Whole Body<br>Dose          |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  | x | 9.81 x 10 <sup>-5</sup>   | or | 1.38 x 10 <sup>-5</sup> | = | _____ mrem<br>at 5.00 miles |
| 15,000 CFM:     | _____ cps  | x | 1.42 x 10 <sup>-4</sup>   | or | 2.00 x 10 <sup>-5</sup> | = | _____ mrem<br>at 5.00 miles |
| 20,000 CFM:     | _____ cps  | x | 1.77 x 10 <sup>-4</sup>   | or | 2.49 x 10 <sup>-5</sup> | = | _____ mrem<br>at 5.00 miles |
| 30,000 CFM:     | _____ cps  | x | 1.61 x 10 <sup>-4</sup>   | or | 2.26 x 10 <sup>-5</sup> | = | _____ mrem<br>at 5.00 miles |

Unstable Conditions

| Flow Rate:      | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Whole Body<br>Dose          |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  | x | 4.09 x 10 <sup>-5</sup>   | or | 5.74 x 10 <sup>-6</sup> | = | _____ mrem<br>at 0.50 miles |
| 15,000 CFM:     | _____ cps  | x | 5.41 x 10 <sup>-5</sup>   | or | 7.59 x 10 <sup>-6</sup> | = | _____ mrem<br>at 0.60 miles |
| 20,000 CFM:     | _____ cps  | x | 6.39 x 10 <sup>-5</sup>   | or | 8.97 x 10 <sup>-6</sup> | = | _____ mrem<br>at 0.60 miles |
| 30,000 CFM:     | _____ cps  | x | 7.50 x 10 <sup>-5</sup>   | or | 1.05 x 10 <sup>-5</sup> | = | _____ mrem<br>at 0.70 miles |

Neutral Conditions

| Flow Rate:      | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Whole Body<br>Dose          |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  | x | 8.81 x 10 <sup>-6</sup>   | or | 1.24 x 10 <sup>-6</sup> | = | _____ mrem<br>at 1.00 miles |
| 15,000 CFM:     | _____ cps  | x | 1.32 x 10 <sup>-5</sup>   | or | 1.85 x 10 <sup>-6</sup> | = | _____ mrem<br>at 1.00 miles |
| 20,000 CFM:     | _____ cps  | x | 1.76 x 10 <sup>-5</sup>   | or | 2.47 x 10 <sup>-6</sup> | = | _____ mrem<br>at 1.00 miles |
| 30,000 CFM:     | _____ cps  | x | 2.64 x 10 <sup>-5</sup>   | or | 3.70 x 10 <sup>-6</sup> | = | _____ mrem<br>at 1.00 miles |

Roof Vent Release

Stable Conditions

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Whole Body<br>Dose          |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | 1.52 x 10 <sup>-5</sup>   | or | 2.30 x 10 <sup>-8</sup> | = | _____ mrem<br>at 1.50 miles |
| 200,000 CFM:     | _____ cpm  | x | 2.86 x 10 <sup>-5</sup>   | or | 4.32 x 10 <sup>-8</sup> | = | _____ mrem<br>at 1.50 miles |
| 300,000 CFM:     | _____ cpm  | x | 3.72 x 10 <sup>-5</sup>   | or | 5.62 x 10 <sup>-8</sup> | = | _____ mrem<br>at 1.50 miles |
| 400,000 CFM:     | _____ cpm  | x | 2.40 x 10 <sup>-5</sup>   | or | 3.26 x 10 <sup>-8</sup> | = | _____ mrem<br>at 1.50 miles |

Unstable Conditions

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Whole Body<br>Dose          |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | 5.19 x 10 <sup>-6</sup>   | or | 7.84 x 10 <sup>-9</sup> | = | _____ mrem<br>at 0.20 miles |
| 200,000 CFM:     | _____ cpm  | x | 9.95 x 10 <sup>-6</sup>   | or | 1.50 x 10 <sup>-8</sup> | = | _____ mrem<br>at 0.20 miles |
| 300,000 CFM:     | _____ cpm  | x | 1.40 x 10 <sup>-5</sup>   | or | 2.11 x 10 <sup>-8</sup> | = | _____ mrem<br>at 0.20 miles |
| 400,000 CFM:     | _____ cpm  | x | 1.51 x 10 <sup>-5</sup>   | or | 3.26 x 10 <sup>-8</sup> | = | _____ mrem<br>at 0.20 miles |

Neutral Conditions

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Whole Body<br>Dose          |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | 2.98 x 10 <sup>-6</sup>   | or | 4.50 x 10 <sup>-9</sup> | = | _____ mrem<br>at 0.20 miles |
| 200,000 CFM:     | _____ cpm  | x | 5.95 x 10 <sup>-6</sup>   | or | 8.98 x 10 <sup>-9</sup> | = | _____ mrem<br>at 0.20 miles |
| 300,000 CFM:     | _____ cpm  | x | 8.93 x 10 <sup>-6</sup>   | or | 1.35 x 10 <sup>-8</sup> | = | _____ mrem<br>at 0.20 miles |
| 400,000 CFM:     | _____ cpm  | x | 1.19 x 10 <sup>-5</sup>   | or | 1.80 x 10 <sup>-8</sup> | = | _____ mrem<br>at 0.20 miles |

THIS DOSE IS THE HIGHEST OFFSITE WHOLE BODY DOSE DUE TO A MAIN STACK OR ROOF VENT RELEASE USING THE ISOTOPIC ABUNDANCE PRESENT 2.50 HRS. AFTER THE REACTOR SHUTDOWN.

2.B HIGHEST OFFSITE THYROID DOSE

USING THE SAME RELEASE POINT, FLOW RATE, COUNT RATE, AND METEOROLOGICAL CONDITIONS FROM SECTION 2.A, PERFORM THE FOLLOWING APPROPRIATE CALCULATION.

1. Calculate the inhalation and ingestion doses.



Main Stack Releases

Stable Conditions

Inhalation

| Flow Rate:      | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Inhalation<br>Dose          |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  | x | 1.04 x 10 <sup>-3</sup>   | or | 1.46 x 10 <sup>-4</sup> | = | _____ mrem<br>at 5.00 miles |
| 15,000 CFM:     | _____ cps  | x | 1.50 x 10 <sup>-3</sup>   | or | 2.10 x 10 <sup>-4</sup> | = | _____ mrem<br>at 5.00 miles |
| 20,000 CFM:     | _____ cps  | x | 1.87 x 10 <sup>-3</sup>   | or | 2.63 x 10 <sup>-4</sup> | = | _____ mrem<br>at 5.00 miles |
| 30,000 CFM:     | _____ cps  | x | 1.70 x 10 <sup>-3</sup>   | or | 2.39 x 10 <sup>-4</sup> | = | _____ mrem<br>at 5.00 miles |

THE INGESTION CALCULATION IS ONLY NECESSARY FOR PASTURE FEEDING PERIOD OF APRIL THROUGH NOVEMBER. INGESTION DOSE FOR DECEMBER TO MARCH SHALL BE ZERO.

Ingestion

| Flow Rate:      | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Ingestion<br>Dose           |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  | x | 7.40 x 10 <sup>-1</sup>   | or | 1.04 x 10 <sup>-1</sup> | = | _____ mrem<br>at 5.00 miles |
| 15,000 CFM:     | _____ cps  | x | 1.07                      | or | 1.50 x 10 <sup>-1</sup> | = | _____ mrem<br>at 5.00 miles |
| 20,000 CFM:     | _____ cps  | x | 1.34                      | or | 2.64 x 10 <sup>-2</sup> | = | _____ mrem<br>at 5.00 miles |
| 30,000 CFM:     | _____ cps  | x | 1.22                      | or | 1.71 x 10 <sup>-1</sup> | = | _____ mrem<br>at 5.00 miles |

Unstable Conditions

Inhalation

| Flow Rate:      | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Inhalation<br>Dose          |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  | x | 2.96 x 10 <sup>-4</sup>   | or | 4.15 x 10 <sup>-5</sup> | = | _____ mrem<br>at 0.50 miles |
| 15,000 CFM:     | _____ cps  | x | 3.98 x 10 <sup>-4</sup>   | or | 5.58 x 10 <sup>-5</sup> | = | _____ mrem<br>at 0.60 miles |
| 20,000 CFM:     | _____ cps  | x | 4.71 x 10 <sup>-4</sup>   | or | 6.61 x 10 <sup>-5</sup> | = | _____ mrem<br>at 0.60 miles |
| 30,000 CFM:     | _____ cps  | x | 5.55 x 10 <sup>-4</sup>   | or | 7.79 x 10 <sup>-5</sup> | = | _____ mrem<br>at 0.70 miles |

THE INGESTION CALCULATION IS ONLY NECESSARY FOR PASTURE FEEDING PERIOD OF APRIL THROUGH NOVEMBER. INGESTION DOSE FOR DECEMBER TO MARCH SHALL BE ZERO.

Ingestion

| Flow Rate:      | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Ingestion<br>Dose           |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  | x | 2.12 x 10 <sup>-1</sup>   | or | 2.97 x 10 <sup>-2</sup> | = | _____ mrem<br>at 0.50 miles |
| 15,000 CFM:     | _____ cps  | x | 2.85 x 10 <sup>-1</sup>   | or | 4.00 x 10 <sup>-2</sup> | = | _____ mrem<br>at 0.60 miles |
| 20,000 CFM:     | _____ cps  | x | 3.37 x 10 <sup>-1</sup>   | or | 4.73 x 10 <sup>-2</sup> | = | _____ mrem<br>at 0.60 miles |
| 30,000 CFM:     | _____ cps  | x | 3.97 x 10 <sup>-1</sup>   | or | 5.57 x 10 <sup>-2</sup> | = | _____ mrem<br>at 0.70 miles |

Neutral Conditions

Inhalation

| Flow Rate:      | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Inhalation<br>Dose          |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  | x | 6.39 x 10 <sup>-5</sup>   | or | 8.97 x 10 <sup>-6</sup> | = | _____ mrem<br>at 1.00 miles |
| 15,000 CFM:     | _____ cps  | x | 9.58 x 10 <sup>-5</sup>   | or | 1.34 x 10 <sup>-5</sup> | = | _____ mrem<br>at 1.00 miles |
| 20,000 CFM:     | _____ cps  | x | 1.28 x 10 <sup>-4</sup>   | or | 1.80 x 10 <sup>-5</sup> | = | _____ mrem<br>at 1.00 miles |
| 30,000 CFM:     | _____ cps  | x | 1.92 x 10 <sup>-4</sup>   | or | 2.69 x 10 <sup>-5</sup> | = | _____ mrem<br>at 1.00 miles |

THE INGESTION CALCULATION IS ONLY NECESSARY FOR PASTURE FEEDING PERIOD OF APRIL THROUGH NOVEMBER. INGESTION DOSE FOR DECEMBER TO MARCH SHALL BE ZERO.

Ingestion

| Flow Rate:      | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Ingestion<br>Dose           |
|-----------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 10,000 CFM: | _____ cps  | x | 4.57 x 10 <sup>-2</sup>   | or | 6.41 x 10 <sup>-3</sup> | = | _____ mrem<br>at 1.00 miles |
| 15,000 CFM:     | _____ cps  | x | 6.86 x 10 <sup>-2</sup>   | or | 9.63 x 10 <sup>-3</sup> | = | _____ mrem<br>at 1.00 miles |
| 20,000 CFM:     | _____ cps  | x | 9.15 x 10 <sup>-2</sup>   | or | 1.28 x 10 <sup>-2</sup> | = | _____ mrem<br>at 1.00 miles |
| 30,000 CFM:     | _____ cps  | x | 1.37 x 10 <sup>-1</sup>   | or | 1.92 x 10 <sup>-2</sup> | = | _____ mrem<br>at 1.00 miles |

- Calculate the total thyroid dose by adding the inhalation and ingestion doses.

Inhalation dose + ingestion dose = thyroid dose

\_\_\_\_\_ mrem + \_\_\_\_\_ mrem = \_\_\_\_\_ mrem at \_\_\_\_\_ miles

THIS DOSE IS THE HIGHEST OFFSITE THYROID DOSE DUE TO A MAIN STACK RELEASE USING 100% I-131 DOSE CONVERSION FACTOR.

Roof Vent Release

1. Calculate the inhalation and ingestion doses.

Stable Conditions

Inhalation

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Inhalation<br>Dose          |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | $1.23 \times 10^{-2}$     | or | $1.86 \times 10^{-5}$   | = | _____ mrem<br>at 1.50 miles |
| 200,000 CFM:     | _____ cpm  | x | $2.30 \times 10^{-2}$     | or | $3.47 \times 10^{-5}$   | = | _____ mrem<br>at 1.50 miles |
| 300,000 CFM:     | _____ cpm  | x | $2.99 \times 10^{-2}$     | or | $4.51 \times 10^{-5}$   | = | _____ mrem<br>at 1.50 miles |
| 400,000 CFM:     | _____ cpm  | x | $1.93 \times 10^{-2}$     | or | $2.91 \times 10^{-5}$   | = | _____ mrem<br>at 1.50 miles |

THE INGESTION CALCULATION IS ONLY NECESSARY FOR PASTURE FEEDING PERIOD OF APRIL THROUGH NOVEMBER. INGESTION DOSE FOR DECEMBER TO MARCH SHALL BE ZERO.

Ingestion

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Ingestion<br>Dose           |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | 8.77                      | or | $1.32 \times 10^{-2}$   | = | _____ mrem<br>at 1.50 miles |
| 200,000 CFM:     | _____ cpm  | x | $1.64 \times 10^1$        | or | $2.48 \times 10^{-2}$   | = | _____ mrem<br>at 1.50 miles |
| 300,000 CFM:     | _____ cpm  | x | $2.14 \times 10^1$        | or | $3.23 \times 10^{-2}$   | = | _____ mrem<br>at 1.50 miles |
| 400,000 CFM:     | _____ cpm  | x | $1.38 \times 10^1$        | or | $2.08 \times 10^{-2}$   | = | _____ mrem<br>at 1.50 miles |

Unstable Conditions

Inhalation

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Inhalation<br>Dose          |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | 3.68 x 10 <sup>-3</sup>   | or | 5.56 x 10 <sup>-6</sup> | = | _____ mrem<br>at 0.20 miles |
| 200,000 CFM:     | _____ cpm  | x | 7.04 x 10 <sup>-3</sup>   | or | 1.06 x 10 <sup>-5</sup> | = | _____ mrem<br>at 0.20 miles |
| 300,000 CFM:     | _____ cpm  | x | 9.88 x 10 <sup>-3</sup>   | or | 1.49 x 10 <sup>-5</sup> | = | _____ mrem<br>at 0.20 miles |
| 400,000 CFM:     | _____ cpm  | x | 1.07 x 10 <sup>-2</sup>   | or | 1.62 x 10 <sup>-5</sup> | = | _____ mrem<br>at 0.20 miles |

THE INGESTION CALCULATION IS ONLY NECESSARY FOR PASTURE FEEDING PERIOD OF APRIL THROUGH NOVEMBER. INGESTION DOSE FOR DECEMBER TO MARCH SHALL BE ZERO.

Ingestion

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Ingestion<br>Dose           |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | 2.63                      | or | 3.97 x 10 <sup>-3</sup> | = | _____ mrem<br>at 0.20 miles |
| 200,000 CFM:     | _____ cpm  | x | 5.04                      | or | 7.61 x 10 <sup>-3</sup> | = | _____ mrem<br>at 0.20 miles |
| 300,000 CFM:     | _____ cpm  | x | 7.07                      | or | 1.07 x 10 <sup>-2</sup> | = | _____ mrem<br>at 0.20 miles |
| 400,000 CFM:     | _____ cpm  | x | 7.67                      | or | 1.16 x 10 <sup>-2</sup> | = | _____ mrem<br>at 0.20 miles |



Neutral Conditions

Inhalation

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Inhalation<br>Dose          |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | 1.76 x 10 <sup>-3</sup>   | or | 2.66 x 10 <sup>-6</sup> | = | _____ mrem<br>at 0.20 miles |
| 200,000 CFM:     | _____ cpm  | x | 3.52 x 10 <sup>-3</sup>   | or | 5.31 x 10 <sup>-6</sup> | = | _____ mrem<br>at 0.20 miles |
| 300,000 CFM:     | _____ cpm  | x | 5.28 x 10 <sup>-3</sup>   | or | 7.97 x 10 <sup>-6</sup> | = | _____ mrem<br>at 0.20 miles |
| 400,000 CFM:     | _____ cpm  | x | 2.54 x 10 <sup>-3</sup>   | or | 3.84 x 10 <sup>-6</sup> | = | _____ mrem<br>at 0.20 miles |

THE INGESTION CALCULATION IS ONLY NECESSARY FOR PASTURE FEEDING PERIOD OF APRIL THROUGH NOVEMBER. INGESTION DOSE FOR DECEMBER TO MARCH SHALL BE ZERO.

Ingestion

| Flow Rate:       | Count Rate | x | Normal<br>Range<br>Factor | or | High<br>Range<br>Factor | = | Ingestion<br>Dose           |
|------------------|------------|---|---------------------------|----|-------------------------|---|-----------------------------|
| For 100,000 CFM: | _____ cpm  | x | 1.26                      | or | 1.90 x 10 <sup>-3</sup> | = | _____ mrem<br>at 0.20 miles |
| 200,000 CFM:     | _____ cpm  | x | 2.52                      | or | 3.80 x 10 <sup>-3</sup> | = | _____ mrem<br>at 0.20 miles |
| 300,000 CFM:     | _____ cpm  | x | 3.78                      | or | 5.71 x 10 <sup>-3</sup> | = | _____ mrem<br>at 0.20 miles |
| 400,000 CFM:     | _____ cpm  | x | 1.82                      | or | 2.75 x 10 <sup>-3</sup> | = | _____ mrem<br>at 0.20 miles |

2. Calculate the total thyroid dose by adding the inhalation and ingestion doses.

Inhalation dose + ingestion dose = thyroid dose

\_\_\_\_\_ mrem + \_\_\_\_\_ mrem = \_\_\_\_\_ mrem at \_\_\_\_\_ miles

THIS DOSE IS THE HIGHEST OFFSITE THYROID DOSE DUE TO A ROOF VENT RELEASE USING 100% I-131 CONVERSION FACTOR.

SECTION 3: REFINED ASSESSMENT OF NOBLE GAS AND RADIOIODINE RELEASES

3.1 Plume Centerline Whole Body Doses based on the Assessment of Noble Gas Releases from the Normal Range Monitors

3.1A. Known Isotopic Breakdown

\* Use Worksheet 2 of Appendix A for the following:

1. Record the point and duration of the release.
2. Record the average count rate.
3. Record the appropriate pressure correction factor.
4. Calculate the corrected count rate.
5. Record the flow rate (CFM) from the appropriate release point.
6. From the gamma scan of the vent or stack sample, record the decimal percent abundance of each isotope listed on the scan.
7. Multiply the decimal percent abundance by the appropriate count rate conversion factor for each isotope that is present.
8. Sum the decay corrected count rate conversion factors to obtain the total count rate conversion factor.
9. Divide the corrected count rate by the total decay corrected count rate conversion factor; multiply by the flow rate and by the units conversion factor of  $472 \text{ min/sec per cc/ft}^3$  to obtain the release rate in  $\text{uCi/sec}$ . Record this release rate on Worksheets 4 and 5 of Appendix A.

\* Use Worksheet 1 of Appendix A for the following:

10. Record the wind speed for the time interval of the release. Use the appropriate instrument as listed below:

For Main Stack Releases:

- 1 - 320' (Tower 2) 3-cup aerovane reading
- 2 - 330' Aerovane reading
- 3 - 75' (Tower 2) 3-cup anemometer reading
- 4 - 90' (Tower 1A) 3-cup anemometer reading
- 5 - 33' (Hill Pole) 3-cup anemometer reading

For Roof Vent Releases:

- 1 - 75' (Tower 2) 3-cup aerovane reading
- 2 - 320' (Tower 2) 3-cup anemometer reading

- c
- 3 - 330' Aerovane reading
- o
- 4 - 90' (Tower 1A) 3-cup anemometer reading
- o
- 5 - 33' (Hill Pole) 3-cup anemometer reading

11. Determine and record the stability class using the wind speed and multipoint temperature chart tracing.

If 320' (Tower 2) 3-cup anemometer reading windspeed  $> 18$  mph  
or 75' (Tower 2) 3-cup anemometer reading windspeed  $\geq 12$  mph  
the stability class is NEUTRAL.

If below the above windspeeds, the stability class is determined by the following:

o

If 1 - 316' temperature - 30' temperature = positive

o

2 - 150' temperature - 30' temperature = positive

o

3 - 90' temperature - 30' temperature = positive

the stability class is STABLE.

o

If 1 - 316' temperature - 30' temperature = negative

o

2 - 150' temperature - 30' temperature = negative

o

3 - 90' temperature - 30' temperature = negative

the stability class is UNSTABLE.

12. If necessary, correct the windspeed reading to the primary Aerovane reading for the point of release.

|          | <u>Main Stack</u><br>Have 75' reading<br>Want 320' reading | <u>Roof Vents</u><br>Have 320' reading<br>Want 75' reading |
|----------|--|--|
| Stable   | 75' reading x 2.0552                                       | 320' reading x 0.4866                                      |
| Unstable | 75' reading x 1.4336                                       | 320' reading x 0.6976                                      |
| Neutral  | 75' reading x 1.5857                                       | 320' reading x 0.6306                                      |

\*\* Note: Treat 330' the same as 320'. Treat 33' and 90' the same as 75'.

13. Determine and record the direction which the wind is blowing TOWARDS by adding 180 degrees to the average wind direction from the recorder. If the wind direction from the recorder is greater than 180 degrees, subtract 180 degrees.

14. Determine the applicable X/Q table number from the Table of Contents for the Relative Dispersion factors (X/Q) in Appendix C. The X/Q table number is determined by the release point, the flow rate, the wind speed, and the stability class.

15. From the appropriate X/Q table in Appendix D, find the dispersion factor (X/Q) for the sector the wind is blowing TOWARDS and the distance of interest.
16. Perform the operations indicated on Worksheet 4 to obtain the  
3  
air concentration ( $\mu\text{Ci}/\text{m}^3$ ) and the resultant gamma whole body dose in mrem.

\*\* Note: Refer to Section 3.9, Plume Travel Time, in order to calculate "x" for the decay expression " $\exp(-Nx)$ ", where "N" is the natural log of 2 over the half-life.

\* Use Worksheet 5 of Appendix A for the following:

17. To obtain the resultant total skin dose, enter the applicable data on the worksheet and perform the operations indicated to obtain the total skin dose in mrem.

### 3.1B. Unknown Isotopic Breakdown

\* Use Worksheet 2 of Appendix A for the following:

1. Perform Steps 1 through 5 of Section 3.1A.
2. Determine and record the decay time, in hours, since the reactor shutdown.
3. From Appendix E, obtain the percent abundance(s) of the isotope(s) present based on the decay time since the reactor shutdown.
4. Continue with Steps 7 through 17 of Section 3.1A.

### 3.2 Plume Centerline Whole Body Doses Based on the Assessment of Noble Gas Releases from the High Monitor

#### 3.2A. Known Isotopic Breakdown

\* Use Worksheet 3 of Appendix A for the following:

1. Record the point and duration of release.
2. Record the average count rate.
3. Record the appropriate pressure correction factor.
4. Calculate the corrected count rate.
5. Record the flow rate (CFM) from the appropriate release point.
6. From the gamma scan of the vent or stack sample, record the decimal percent abundance of each isotope listed on the scan.



7. Multiply the decimal percent abundance by the appropriate count rate conversion factor for each isotope that is present.
8. Sum the decay corrected count rate conversion factors to obtain the total decay corrected count rate conversion factor.
9. Divide the corrected count rate by the total decay corrected count rate conversion factor; multiply the flow rate by the units conversion factor of:  $472 \text{ min/sec per cc/ft}^3$  to obtain the release rate in  $\mu\text{Ci/sec}$ . Record the release rate on worksheets 4 and 5 of Appendix A.
10. Continue with Steps 10 through 17 of Section 3.1A.

### 3.2B. Unknown Isotopic Breakdown

\* Use Worksheet 3 of Appendix A for the following:

1. Perform Steps 1 through 5 of Section 3.1A.
2. Determine and record the decay time since the reactor shut down.
3. From Appendix E, obtain the percent abundance(s) of the isotope(s) present based on the decay time since the reactor shut down.
4. Continue with Steps 7 through 17 of Section 3.1A.

### 3.3 Off-Plume Centerline Whole Body Doses and/or Concentrations

\*\*Note: Overlays are not applicable to a roof vent release.

\* Use Worksheet 6 of Appendix A for the following:

1. Select the appropriate overlay for the existing stability class.  
  
For stable conditions: use overlay V  
For unstable conditions: use overlay II  
For neutral conditions: use overlay IV
2. Mount the overlay on the map with the origin at the main stack.
3. Rotate the overlay to align the centerline with the direction the wind is blowing TOWARDS.
4. Select the location(s) of interest and record them on the worksheet.
5. Estimate the decimal fraction of the reduction from the centerline, using the values on the overlay for the selected location(s). Record this decimal fraction on the worksheet.



6. Multiply the centerline whole body dose and/or concentration by the decimal fraction to obtain the off-centerline whole body dose and/or concentration at the point of interest.
7. See Appendix F for the population distribution numbers.

3.4 Plume Centerline Thyroid Doses Based on the Assessment of Radioiodine Release from the Normal Range Monitors

3.4A. Known Isotopic Breakdown

\* Use Worksheet 7A of Appendix A for the following:

1. Obtain the main stack or roof vent iodine activity released from the Chemistry Sampling and Analysis Group Leader.
2. Estimate the duration of the release.

\*\*Note: For a "puff-type release or short term releases with consistent meteorology", the duration of the release corresponds to the total period of release.

For a long term release with consistent meteorology, the duration of the release corresponds to the total period of release.

If any of the meteorological conditions change, divide the release into segments according to such changes.

3. Obtain the meteorological conditions and stability class from Worksheet 1 of Appendix A.
4. Based on the meteorological conditions and stability class, determine the applicable X/Q table number from the Table of Contents for the Relative Dispersion factors (X/Q) in Appendix C. The X/Q table number is determined by the release point, the flow rate, the wind speed, and the stability class.
5. From the appropriate X/Q table in Appendix D, find the dispersion factor (X/Q) for the sector the wind is blowing TOWARDS and the distance of interest.
6. Perform the operations indicated on the worksheet to obtain  
3  
the air concentration ( $\mu\text{Ci}/\text{m}$ ) and the resultant iodine (thyroid) dose in mrem. Refer to Section 3.9, Plume Travel Time in order to calculate "x" for decay expression, " $\text{exp}^{-(Nt)}$ ", where "N" is the natural log of 2 over the half-life.

\*\*Note: December through March the ingestion dose is zero.

3.4B. Unknown Isotopic Breakdown

\* Use Worksheet 7B of Appendix A for the following:

1. Obtain the noble gas release rate, calculated in Section 3.1B, based on the time since the reactor shut down.
2. Estimate the duration of the radioiodine release.
3. Obtain the meteorological conditions and stability class from Worksheet 1 of Appendix A.
4. Based on the meteorological conditions and stability class, determine the applicable X/Q table number from the Table of Contents for the Relative Dispersion factors (X/Q) in Appendix C.

The X/Q table number is determined by the release point, the flow rate, the windspeed and the stability class.

5. From the appropriate X/Q table in Appendix D, find the dispersion factor (X/Q) for the sector the wind is blowing TOWARDS and the distance of interest.
6. Perform the operations indicated on the worksheet to obtain the air concentration ( $\mu\text{Ci}/\text{m}^3$ ) and the resultant iodine (thyroid) dose in mrem. Refer to Section 3.9, Plume Travel Time, in order to calculate "x" for the decay expression, " $\exp(-Nx)$ ", where "N" is the natural log of 2 over the half-life.

\*\*Note: The iodine (thyroid) dose is calculated assuming the radioiodine release to be 100% I-131. Also, the ingestion dose is zero if December through March.

### 3.5 Plume Centerline Thyroid Doses Based on the Assessment of Radioiodine Releases from the High Range Monitor

#### 3.5A. Known Isotopic Breakdown

\* Use Worksheet 7A of Appendix A for the following:

1. Follow all steps of Section 3.4A in order to calculate thyroid doses based on the assessment of radioiodine releases from the high range monitor.

#### 3.5B. Unknown Isotopic Breakdown

\* Use Worksheet 7B of Appendix A for the following:

1. Follow all steps of Section 3.4B EXCEPT, use the noble gas release rate calculated in Section 3.2B based on the time since the reactor shut down, in order to calculate thyroid doses based on the assessment of radioiodine releases from the high range monitor.

### 3.6 Off-Plume Centerline Thyroid Doses

**\*\*Note:** Overlays are not applicable to a roof vent release.

\* Use Worksheet 8 of Appendix A for the following:

1. Follow all steps in Section 3.3 in order to obtain off-plume centerline thyroid doses.

### 3.7 Thyroid Dose Rate from Survey Data

**\*\*Note:** Calculations for thyroid dose rates from field survey data will be performed by the Radiation Protection Team utilizing HPA-16.

### 3.8 Ground Deposition

#### 3.8A Plume Centerline Off-Site Ground Deposition Concentrations

\* Use Worksheet 9 of Appendix A for the following:

1. Record the main stack or roof vent(s) I-131 and/or Cs-137 activity obtained from the Chemistry Sampling and Analysis Group Leader.
2. Estimate the duration of the release.
3. Refer to the meteorological conditions and the stability class recorded on Worksheet 1 of Appendix A to determine the applicable X/Q table number from the Relative Dispersion factors (X/Q) Table of Contents.
4. Obtain the distance(s) of interest and the corresponding X/Q value.
5. Perform the operations indicated on the worksheet to obtain the plume centerline off-site ground deposition for the point(s) of interest.

#### 3.8B. Off-Plume Centerline Off-Site Ground Deposition Concentrations

**\*\*Note:** Overlays are not applicable to a roof vent release.

\* Use Worksheet 10 of Appendix A for the following:

1. Follow the methodology described in Section 3.3 for calculating off-plume centerline ground deposition concentrations.

### 3.9 Plume Travel Time

\* Use Worksheet 11 of Appendix A for the following:

1. Refer to Worksheet 1 of Appendix A for meteorological conditions.
2. Perform the calculations indicated on the worksheet to determine plume travel time.

Worksheet 1  
Meteorological Calculations

Windspeed

Main Stack \_\_\_\_\_ mph; instrument: \_\_\_\_\_

Roof Vent \_\_\_\_\_ mph; instrument: \_\_\_\_\_

Stability Class

Neutral if 320' reading  $> 18$  mph or  
75' reading  $> 12$  mph

Stable if \_\_\_\_\_ temperature - \_\_\_\_\_ temperature = positive  
\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

Unstable if \_\_\_\_\_ temperature - \_\_\_\_\_ temperature = negative  
\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

Corrected Windspeed (if necessary)

Main Stack

Have 75', 90' or 33' readings, want 320' reading:

If Stable: \_\_\_\_\_ mph x 2.0552 = \_\_\_\_\_ mph

Unstable: \_\_\_\_\_ mph x 1.4336 = \_\_\_\_\_ mph

Neutral: \_\_\_\_\_ mph x 1.5857 = \_\_\_\_\_ mph

Roof Vents

Have 320', 33', readings, want 75' reading:

If Stable: \_\_\_\_\_ mph x 0.4866 = \_\_\_\_\_ mph

Unstable: \_\_\_\_\_ mph x 0.6976 = \_\_\_\_\_ mph

Neutral: \_\_\_\_\_ mph x 0.6306 = \_\_\_\_\_ mph

Wind Direction

If recorder reading < 180 degrees:  
recorder reading + 180 degrees = towards  
From \_\_\_\_\_ + 180 degrees = towards \_\_\_\_\_

If recorder reading > 180 degrees:  
recorder reading - 180 degrees = towards  
From \_\_\_\_\_ - 180 degrees = towards \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_



Worksheet 2  
Noble Gas Release Rate Calculations  
Based on the Normal Range Monitors

Point of Release: \_\_\_\_\_  
 Duration of Release: \_\_\_\_\_ hrs.  
 Count Rate: \_\_\_\_\_  
 Pressure Correction Factor: \_\_\_\_\_

Corrected Count Rate = Count Rate x Pressure Correction Factor

Flow Rate: \_\_\_\_\_ = \_\_\_\_\_ x \_\_\_\_\_

Isotopic Abundance = Known      Unknown      (circle one)

Decay Time Since Reactor Scram: \_\_\_\_\_ hrs.

| <u>Isotope</u> | <u>Decimal Percent Abundance</u> | x | <u>Main Stack Count Rate Conversion</u><br>(Count Rate per _____) | or | <u>Roof Vent Count Rate Conversion</u><br>(Count Rate per _____) | = | <u>Count Rate Conversion Factor</u><br>(Count Rate per uCi/cc) |
|----------------|----------------------------------|---|---|----|--|---|--|
| Kr-85          | _____                            | x | 2.20x10 <sup>4</sup>  | or | 8.97x10 <sup>8</sup>   | = | _____  |
| Kr-85m         | _____                            | x | 1.75x10 <sup>6</sup>  | or | 8.97x10 <sup>8</sup>   | = | _____  |
| Kr-87          | _____                            | x | 1.42x10 <sup>6</sup>  | or | 7.18x10 <sup>8</sup>   | = | _____  |
| Kr-88          | _____                            | x | 1.97x10 <sup>6</sup>  | or | 7.18x10 <sup>8</sup>   | = | _____  |
| Xe-131m        | _____                            | x | 4.07x10 <sup>4</sup>  | or | 8.97x10 <sup>8</sup>   | = | _____  |
| Xe-133         | _____                            | x | 3.29x10 <sup>5</sup>  | or | 1.26x10 <sup>9</sup>   | = | _____  |
| Xe-133m        | _____                            | x | 1.37x10 <sup>4</sup>  | or | 8.97x10 <sup>8</sup>   | = | _____  |
| Xe-135         | _____                            | x | 1.84x10 <sup>6</sup>  | or | 7.62x10 <sup>8</sup>   | = | _____  |
| Xe-135m        | _____                            | x | 1.33x10 <sup>6</sup>  | or | 8.97x10 <sup>8</sup>   | = | _____  |
| Xe-137         | _____                            | x | 5.74x10 <sup>5</sup>  | or | 7.18x10 <sup>8</sup>   | = | _____  |
| Xe-138         | _____                            | x | 1.95x10 <sup>6</sup>  | or | 7.18x10 <sup>8</sup>   | = | _____  |

$\frac{\text{Corrected Count Rate} \times \text{Flow (CFM)}}{\text{Count Rate per uCi/cc}} \times 472 \frac{\text{min cc}}{\text{sec ft}^3} = \text{Release Rate}$

\_\_\_\_\_ x \_\_\_\_\_ x  $472 \frac{\text{min cc}}{\text{sec ft}^3} = \text{_____ uCi/sec.}$

Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Time: \_\_\_\_\_

Worksheet 3  
Noble Gas Release Rate Calculations  
Based on the High Range Monitors

Point of Release: \_\_\_\_\_  
 Duration of Release: \_\_\_\_\_ hrs.  
 Count Rate: \_\_\_\_\_  
 Pressure Correction Factor: \_\_\_\_\_

Corrected Count Rate = Count Rate x Pressure Correction Factor

Flow Rate: \_\_\_\_\_ = \_\_\_\_\_ x \_\_\_\_\_

Isotopic Abundance = Known      Unknown      (circle one)

Decay Time Since Reactor Scram: \_\_\_\_\_ hrs.

| Isotope | Decimal Percent Abundance | x | Main Stack Count Rate Conversion<br>(Count Rate per $\frac{4}{\text{uCi/cc}}$ ) | or | Roof Vent Count Rate Conversion<br>(Count Rate per $\frac{9}{\text{uCi/cc}}$ ) | = | Count Rate Conversion Factor<br>(Count Rate per $\frac{9}{\text{uCi/cc}}$ ) |
|---------|---------------------------|---|---|----|--|---|---|
| Kr-85   | _____                     | x | 3.30x10 <sup>6</sup>  | or | 1.34x10 <sup>9</sup>   | = | _____   |
| Kr-85m  | _____                     | x | 2.01x10 <sup>7</sup>  | or | 8.18x10 <sup>10</sup>  | = | _____   |
| Kr-87   | _____                     | x | 1.51x10 <sup>7</sup>  | or | 6.16x10 <sup>11</sup>  | = | _____   |
| Kr-88   | _____                     | x | 2.23x10 <sup>7</sup>  | or | 9.07x10 <sup>11</sup>  | = | _____   |
| Xe-131m | _____                     | x | 4.40x10 <sup>4</sup>  | or | 1.79x10 <sup>9</sup>   | = | _____   |
| Xe-133  | _____                     | x | 1.93x10 <sup>5</sup>  | or | 7.84x10 <sup>9</sup>   | = | _____   |
| Xe-133m | _____                     | x | 4.40x10 <sup>6</sup>  | or | 1.79x10 <sup>10</sup>  | = | _____   |
| Xe-135  | _____                     | x | 3.58x10 <sup>6</sup>  | or | 1.46x10 <sup>11</sup>  | = | _____   |
| Xe-135m | _____                     | x | 6.60x10 <sup>6</sup>  | or | 2.69x10 <sup>11</sup>  | = | _____   |
| Xe-137  | _____                     | x | 2.15x10 <sup>6</sup>  | or | 8.74x10 <sup>10</sup>  | = | _____   |
| Xe-138  | _____                     | x | 9.90x10 <sup>6</sup>  | or | 4.03x10 <sup>11</sup>  | = | _____   |

$\frac{\text{Corrected Count Rate} \times \text{Flow (CFM)}}{\text{Count Rate per uCi/cc}}$  x 472  $\frac{\text{min cc}}{\text{sec ft}^3}$

= Release Rate

\_\_\_\_\_ x \_\_\_\_\_ x 472  $\frac{\text{min cc}}{\text{sec ft}^3}$

= \_\_\_\_\_ uCi/sec.

Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Time: \_\_\_\_\_

Worksheet 4  
Plume Centerline Gamma (Whole Body) Dose Calculations

X/Q Table #: \_\_\_\_\_  
Sector: \_\_\_\_\_ Distance: \_\_\_\_\_

| Isotope | (1) Release Rate (uCi/sec) | x | Dispersion Factor <sup>3</sup> (sec/m) | = | Air Concentration <sup>3</sup> (uCi/m) | x | Dose Conversion Factor <sup>3</sup> (mrem-m per uCi-hr) | x | Release Duration (hrs.) | x | Decay Correction | = | Gamma (Whole Body) Dose (mrem) |
|---------|----------------------------|---|--|---|--|---|---|---|-------------------------|---|------------------|---|--------------------------------|
| Ar-41   | _____                      | x | _____                                  | = | _____                                  | x | $1.11 \times 10^0$                                      | x | _____                   | x | $\exp(-.38x)$    | = | _____                          |
| Kr-83m  | _____                      | x | _____                                  | = | _____                                  | x | $8.63 \times 10^{-6}$                                   | x | _____                   | x | $\exp(-.37x)$    | = | _____                          |
| Kr-85m  | _____                      | x | _____                                  | = | _____                                  | x | $1.34 \times 10^{-1}$                                   | x | _____                   | x | $\exp(-.16x)$    | = | _____                          |
| Kr-85   | _____                      | x | _____                                  | = | _____                                  | x | $1.84 \times 10^{-3}$                                   | x | _____                   | x | 1                | = | _____                          |
| Kr-87   | _____                      | x | _____                                  | = | _____                                  | x | $6.76 \times 10^{-1}$                                   | x | _____                   | x | $\exp(-.55x)$    | = | _____                          |
| Kr-88   | _____                      | x | _____                                  | = | _____                                  | x | $1.68 \times 10^0$                                      | x | _____                   | x | $\exp(-.25x)$    | = | _____                          |
| Xe-131m | _____                      | x | _____                                  | = | _____                                  | x | $1.04 \times 10^{-2}$                                   | x | _____                   | x | $\exp(-.002x)$   | = | _____                          |
| Xe-133m | _____                      | x | _____                                  | = | _____                                  | x | $2.87 \times 10^{-2}$                                   | x | _____                   | x | $\exp(-.01x)$    | = | _____                          |
| Xe-133  | _____                      | x | _____                                  | = | _____                                  | x | $3.36 \times 10^{-2}$                                   | x | _____                   | x | $\exp(-.01x)$    | = | _____                          |
| Xe-135m | _____                      | x | _____                                  | = | _____                                  | x | $3.12 \times 10^{-3}$                                   | x | _____                   | x | $\exp(-2.67x)$   | = | _____                          |
| Xe-135  | _____                      | x | _____                                  | = | _____                                  | x | $2.07 \times 10^{-1}$                                   | x | _____                   | x | $\exp(-.08x)$    | = | _____                          |
| Xe-137  | _____                      | x | _____                                  | = | _____                                  | x | $1.62 \times 10^{-1}$                                   | x | _____                   | x | $\exp(-10.7x)$   | = | _____                          |
| Xe-138  | _____                      | x | _____                                  | = | _____                                  | x | 1.01  | x | _____                   | x | $\exp(-2.39x)$   | = | _____                          |

= \_\_\_\_\_ mrem  
at \_\_\_\_\_ miles

Name: \_\_\_\_\_  
Date: \_\_\_\_\_  
Time: \_\_\_\_\_

Worksheet 5  
Plume Centerline Total Skin Dose Calculations

X/Q Table #: \_\_\_\_\_  
Sector: \_\_\_\_\_  
Distance: \_\_\_\_\_

| Isotope | Release Rate |   | Dispersion Factor |   | Air Concentration |   | Dose Conversion Factor |   | Release Duration (hrs.) | Beta(Skin) Dose (mrem) | Gamma Whole Body Dose (mrem) | Total Skin Dose (mrem) |       |
|---------|--------------|---|-------------------|---|-------------------|---|------------------------|---|-------------------------|------------------------|------------------------------|------------------------|-------|
|         | (uCi/sec)    | x | (sec/m)           | = | (uCi/m)           | x | (mrem-m per uCi-hr)    | x |                         |                        |                              |                        |       |
| Ar-41   | _____        | x | _____             | = | _____             | x | $3.07 \times 10^{-1}$  | x | _____                   | =                      | _____                        | =                      | _____ |
| Kr-85m  | _____        | x | _____             | = | _____             | x | $1.67 \times 10^{-1}$  | x | _____                   | =                      | _____                        | =                      | _____ |
| Kr-85   | _____        | x | _____             | = | _____             | x | $1.53 \times 10^{-1}$  | x | _____                   | =                      | _____                        | =                      | _____ |
| Kr-87   | _____        | x | _____             | = | _____             | x | $1.07 \times 10^0$     | x | _____                   | =                      | _____                        | =                      | _____ |
| Kr-88   | _____        | x | _____             | = | _____             | x | $2.71 \times 10^{-1}$  | x | _____                   | =                      | _____                        | =                      | _____ |
| Xe-131m | _____        | x | _____             | = | _____             | x | $1.13 \times 10^{-1}$  | x | _____                   | =                      | _____                        | =                      | _____ |
| Xe-133  | _____        | x | _____             | = | _____             | x | $3.49 \times 10^{-2}$  | x | _____                   | =                      | _____                        | =                      | _____ |
| Xe-135m | _____        | x | _____             | = | _____             | x | $8.12 \times 10^{-2}$  | x | _____                   | =                      | _____                        | =                      | _____ |
| Xe-135  | _____        | x | _____             | = | _____             | x | $2.12 \times 10^{-1}$  | x | _____                   | =                      | _____                        | =                      | _____ |
| Xe-137  | _____        | x | _____             | = | _____             | x | 1.39                   | x | _____                   | =                      | _____                        | =                      | _____ |
| Xe-138  | _____        | x | _____             | = | _____             | x | $4.71 \times 10^{-1}$  | x | _____                   | =                      | _____                        | =                      | _____ |

= \_\_\_\_\_ mrem  
at \_\_\_\_\_ miles

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_





Worksheet 7A

Plume Centerline Thyroid Dose Calculations - Known Isotopic Breakdown-  
Based on the Normal or High Range Monitor (s)

Point of Release: \_\_\_\_\_ : Normal Range or High Range (circle one)

Duration of Release: \_\_\_\_\_ (hrs.) x 3600 secs. = \_\_\_\_\_ secs.

Iodine Activity:

I-131 \_\_\_\_\_ uCi

I-133 \_\_\_\_\_ uCi

I-131 Release Rate =  $\frac{\text{I-131 Activity}}{\text{Duration of Release}}$

I-133 Release =  $\frac{\text{I-133 Activity}}{\text{Duration of Release}}$

\_\_\_\_\_ uCi/sec = \_\_\_\_\_  $\frac{\text{uCi}}{\text{sec}}$

\_\_\_\_\_ uCi/sec = \_\_\_\_\_  $\frac{\text{uCi}}{\text{sec}}$

Inhalation

|              |            |                        |          |             |             |                  |
|--------------|------------|------------------------|----------|-------------|-------------|------------------|
| I-131        | Dispersion | Dose Conversion        | Release  | Thyroid     | Decay       | Decay Corrected  |
| Release Rate | Factor     | Factor                 | Duration | (Iodine)    | Correction  | Thyroid (Iodine) |
| (uCi/sec)    | (sec/m)    | (mrem-m per uCi-hr)    | (hrs)    | Dose (mrem) |             | (mrem)           |
| _____ x      | _____ x    | _____ x                | _____ x  | _____ =     | _____ x     | _____ =          |
|              |            | 1.69 x 10 <sup>3</sup> |          |             | exp(-.004x) | _____ =          |
|              |            |                        |          |             |             | at _____ miles   |

|              |            |                        |          |             |             |                  |
|--------------|------------|------------------------|----------|-------------|-------------|------------------|
| I-133        | Dispersion | Dose Conversion        | Release  | Thyroid     | Decay       | Decay Corrected  |
| Release Rate | Factor     | Factor                 | Duration | (Iodine)    | Correction  | Thyroid (Iodine) |
| (uCi/sec)    | (sec/m)    | (mrem-m per uCi-hr)    | (hrs)    | Dose (mrem) |             | (mrem)           |
| _____ x      | _____ x    | _____ x                | _____ x  | _____ =     | _____ x     | _____ =          |
|              |            | 4.67 x 10 <sup>2</sup> |          |             | exp(-.034x) | _____ =          |
|              |            |                        |          |             |             | at _____ miles   |

Ingestion

|              |            |                        |          |             |             |                  |
|--------------|------------|------------------------|----------|-------------|-------------|------------------|
| I-131        | Dispersion | Dose Conversion        | Release  | Thyroid     | Decay       | Decay Corrected  |
| Release Rate | Factor     | Factor                 | Duration | (Iodine)    | Correction  | Thyroid (Iodine) |
| (uCi/sec)    | (sec/m)    | (mrem-m per uCi-hr)    | (hrs)    | Dose (mrem) |             | (mrem)           |
| _____ x      | _____ x    | _____ x                | _____ x  | _____ =     | _____ x     | _____ =          |
|              |            | 1.21 x 10 <sup>6</sup> |          |             | exp(-.004x) | _____ =          |
|              |            |                        |          |             |             | at _____ miles   |

Total Thyroid Dose = Inhalation + Ingestion Dose

\_\_\_\_\_ mrem = \_\_\_\_\_ mrem + \_\_\_\_\_ mrem at \_\_\_\_\_ miles

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Worksheet 7B  
Plume Centerline Thyroid Dose Calculations - Unknown Isotopic Breakdown -  
Based on the Normal or High Range Monitor(s)

Point of Release: \_\_\_\_\_; Normal Range or High Range (circle one)  
Noble Gas Release Rate: \_\_\_\_\_ uCi/sec  
Duration of Release: \_\_\_\_\_ (hrs)

Main Stack Release  
Inhalation

|  |   |                                       |   |  |   |   |   |                                |   |                                    |   |                                    |                |  |
|--|---|---------------------------------------|---|--|---|---|---|--------------------------------|---|------------------------------------|---|------------------------------------|----------------|--|
| Noble Gas<br>Release Rate<br>(uCi/sec) | x | Dilution<br>Factor<br>$\frac{1}{300}$ | x | Dispersion<br>Factor<br>(sec/m) <sup>3</sup> | x | Dose Conversion<br>Factor<br>(mrem-m per uCi-hr) <sup>3</sup><br>1.69 x 10 <sup>3</sup> | x | Release<br>Duration<br>(Hours) | = | Thyroid<br>(Iodine)<br>dose (mrem) | x | Decay<br>Correction<br>exp(-.004x) | =              | Decay Corrected<br>Thyroid (Iodine)<br>dose (mrem) |
| _____                                  | x | $\frac{1}{300}$                       | x | _____  | x | 1.69 x 10 <sup>3</sup>  | x | _____                          | = | _____                              | x | exp(-.004x)                        | =              | _____  |
|  |   |                                       |   |  |   |   |   |                                |   |                                    |   |                                    | at _____ miles |  |

Ingestion

|  |   |                                       |   |  |   |   |   |                                |   |                                    |   |                                    |                |  |
|--|---|---------------------------------------|---|--|---|---|---|--------------------------------|---|------------------------------------|---|------------------------------------|----------------|--|
| Noble Gas<br>Release Rate<br>(uCi/sec) | x | Dilution<br>Factor<br>$\frac{1}{300}$ | x | Dispersion<br>Factor<br>(sec/m) <sup>3</sup> | x | Dose Conversion<br>Factor<br>(mrem-m per uCi-hr) <sup>6</sup><br>1.21 x 10 <sup>6</sup> | x | Release<br>Duration<br>(Hours) | = | Thyroid<br>(Iodine)<br>dose (mrem) | x | Decay<br>Correction<br>exp(-.004x) | =              | Decay Corrected<br>Thyroid (Iodine)<br>dose (mrem) |
| _____                                  | x | $\frac{1}{300}$                       | x | _____  | x | 1.21 x 10 <sup>6</sup>  | x | _____                          | = | _____                              | x | exp(-.004x)                        | =              | _____  |
|  |   |                                       |   |  |   |   |   |                                |   |                                    |   |                                    | at _____ miles |  |

Total Thyroid Dose = Inhalation Dose + Ingestion Dose

\_\_\_\_\_ mrem = \_\_\_\_\_ mrem + \_\_\_\_\_ mrem at \_\_\_\_\_ miles

Roof Vent Release  
Inhalation

|  |   |                                     |   |  |   |   |   |                                |   |                                    |   |                                    |                |  |
|--|---|-------------------------------------|---|--|---|---|---|--------------------------------|---|------------------------------------|---|------------------------------------|----------------|--|
| Noble Gas<br>Release Rate<br>(uCi/sec) | x | Dilution<br>Factor<br>$\frac{1}{3}$ | x | Dispersion<br>Factor<br>(sec/m) <sup>3</sup> | x | Dose Conversion<br>Factor<br>(mrem-m per uCi-hr) <sup>3</sup><br>1.69 x 10 <sup>3</sup> | x | Release<br>Duration<br>(Hours) | = | Thyroid<br>(Iodine)<br>dose (mrem) | x | Decay<br>Correction<br>exp(-.004x) | =              | Decay Corrected<br>Thyroid (Iodine)<br>dose (mrem) |
| _____                                  | x | $\frac{1}{3}$                       | x | _____  | x | 1.69 x 10 <sup>3</sup>  | x | _____                          | = | _____                              | x | exp(-.004x)                        | =              | _____  |
|  |   |                                     |   |  |   |   |   |                                |   |                                    |   |                                    | at _____ miles |  |

Ingestion

|  |   |                                     |   |  |   |   |   |                                |   |                                    |   |                                    |                |  |
|--|---|-------------------------------------|---|--|---|---|---|--------------------------------|---|------------------------------------|---|------------------------------------|----------------|--|
| Noble Gas<br>Release Rate<br>(uCi/sec) | x | Dilution<br>Factor<br>$\frac{1}{3}$ | x | Dispersion<br>Factor<br>(sec/m) <sup>3</sup> | x | Dose Conversion<br>Factor<br>(mrem-m per uCi-hr) <sup>6</sup><br>1.21 x 10 <sup>6</sup> | x | Release<br>Duration<br>(Hours) | = | Thyroid<br>(Iodine)<br>dose (mrem) | x | Decay<br>Correction<br>exp(-.004x) | =              | Decay Corrected<br>Thyroid (Iodine)<br>dose (mrem) |
| _____                                  | x | $\frac{1}{3}$                       | x | _____  | x | 1.21 x 10 <sup>6</sup>  | x | _____                          | = | _____                              | x | exp(-.004x)                        | =              | _____  |
|  |   |                                     |   |  |   |   |   |                                |   |                                    |   |                                    | at _____ miles |  |

Total Thyroid Dose = Inhalation Dose + Ingestion Dose

\_\_\_\_\_ mrem = \_\_\_\_\_ mrem + \_\_\_\_\_ mrem at \_\_\_\_\_ miles

Name: \_\_\_\_\_  
Date: \_\_\_\_\_  
Time: \_\_\_\_\_



Worksheet 9  
Plume Centerline Off-Site Ground Deposition Concentrations

Point of Release \_\_\_\_\_  
 I-131 Activity \_\_\_\_\_ uCi  
 Cs-137 Activity \_\_\_\_\_ uCi  
 Duration of Release \_\_\_\_\_ (hrs) x 3600 secs = \_\_\_\_\_ secs.

I-131 Release Rate  
 I-131 Activity x decay correction = \_\_\_\_\_ uCi x 0.84 = \_\_\_\_\_ uCi/secs.  
 Duration of Release \_\_\_\_\_ sec

I-137 Release Rate  
 Cs-137 Activity x decay correction = \_\_\_\_\_ uCi x 1.00 = \_\_\_\_\_ uCi/secs.  
 Duration of Release \_\_\_\_\_ sec

| Sector | Distance | Main Stack<br>3<br>(sec/m) | + Roof Vent 2<br>3<br>(sec/m) | + Roof Vent 3<br>3<br>(sec/m) | = Total<br>3<br>(sec/m) | x Release Rate<br>(uCi/sec) | x Conversion Factor<br>(m/hr) | = Ground Deposition Concentration<br>2<br>(uCi/M-hr) |
|--------|----------|----------------------------|-------------------------------|-------------------------------|-------------------------|-----------------------------|-------------------------------|--|
|        |          |                            |                               |                               |                         |                             | x 36                          |  |
|        |          |                            |                               |                               |                         |                             | x 36                          |  |
|        |          |                            |                               |                               |                         |                             | x 36                          |  |
|        |          |                            |                               |                               |                         |                             | x 36                          |  |
|        |          |                            |                               |                               |                         |                             | x 36                          |  |
|        |          |                            |                               |                               |                         |                             | x 36                          |  |

Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Time: \_\_\_\_\_







Worksheet 11  
Plume Travel Time

Windspeed: \_\_\_\_\_ mph

$$\text{Plume Travel Time (hrs)} = \frac{\text{Distance of Interest (miles)}}{\text{Wind speed (mph)}}$$

| Distance<br>(Miles) | Windspeed<br>(mph) | = Plume Travel Time<br>(hours) |
|---------------------|--------------------|--------------------------------|
|                     |                    |                                |
|                     |                    |                                |
|                     |                    |                                |
|                     |                    |                                |
|                     |                    |                                |
|                     |                    |                                |
|                     |                    |                                |

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Worksheet 12  
EP-317 Refined Input Parameters

For the Area of Concern:

Distance of Interest \_\_\_\_\_ miles

Sector \_\_\_\_\_

Windspeed \_\_\_\_\_ mph

Expected Duration of Release \_\_\_\_\_ hrs

Calculated (projected) Whole Body Dose \_\_\_\_\_ rem

Calculated (projected) Thyroid Dose \_\_\_\_\_ rem

Field Survey Whole Body Dose Rate \_\_\_\_\_ rem/hr

Field Survey Thyroid Dose Rate \_\_\_\_\_ rem/hr

I-131 Ground Deposition Concentration \_\_\_\_\_ uCi/m<sup>2</sup>

Cs-137 Ground Deposition Concentration \_\_\_\_\_ uCi/m<sup>2</sup>

Plume Travel Time to Distance of Interest \_\_\_\_\_ hrs

Dispersion Factor (X/Q) \_\_\_\_\_ sec/m<sup>3</sup>

EP-3.7 Recommendations:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Worksheet 13  
EP-317 Rapid Input Parameters

Point of Release: \_\_\_\_\_

Expected Duration of Release: \_\_\_\_\_ hr.

For Worse Case Meteorology Assessment

Whole Body Dose: \_\_\_\_\_ mrem at \_\_\_\_\_ miles.

Thyroid Dose: \_\_\_\_\_ mrem at \_\_\_\_\_ miles.

For Actual Meteorology Assessment

Windspeed: \_\_\_\_\_ mph

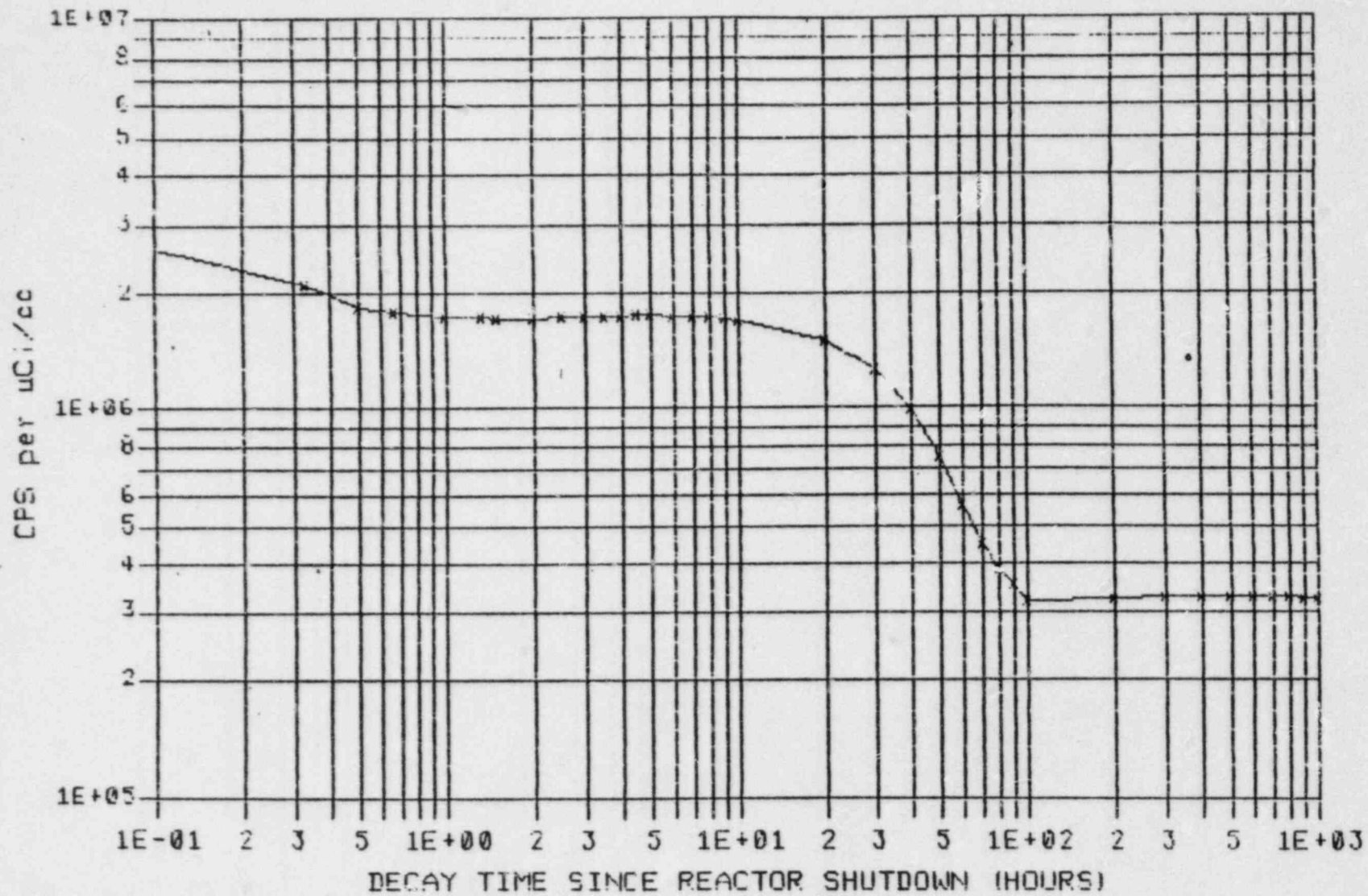
Wind Direction (towards): \_\_\_\_\_ degrees.

Stability Class: \_\_\_\_\_

Whole Body Dose: \_\_\_\_\_ mrem at \_\_\_\_\_ miles.

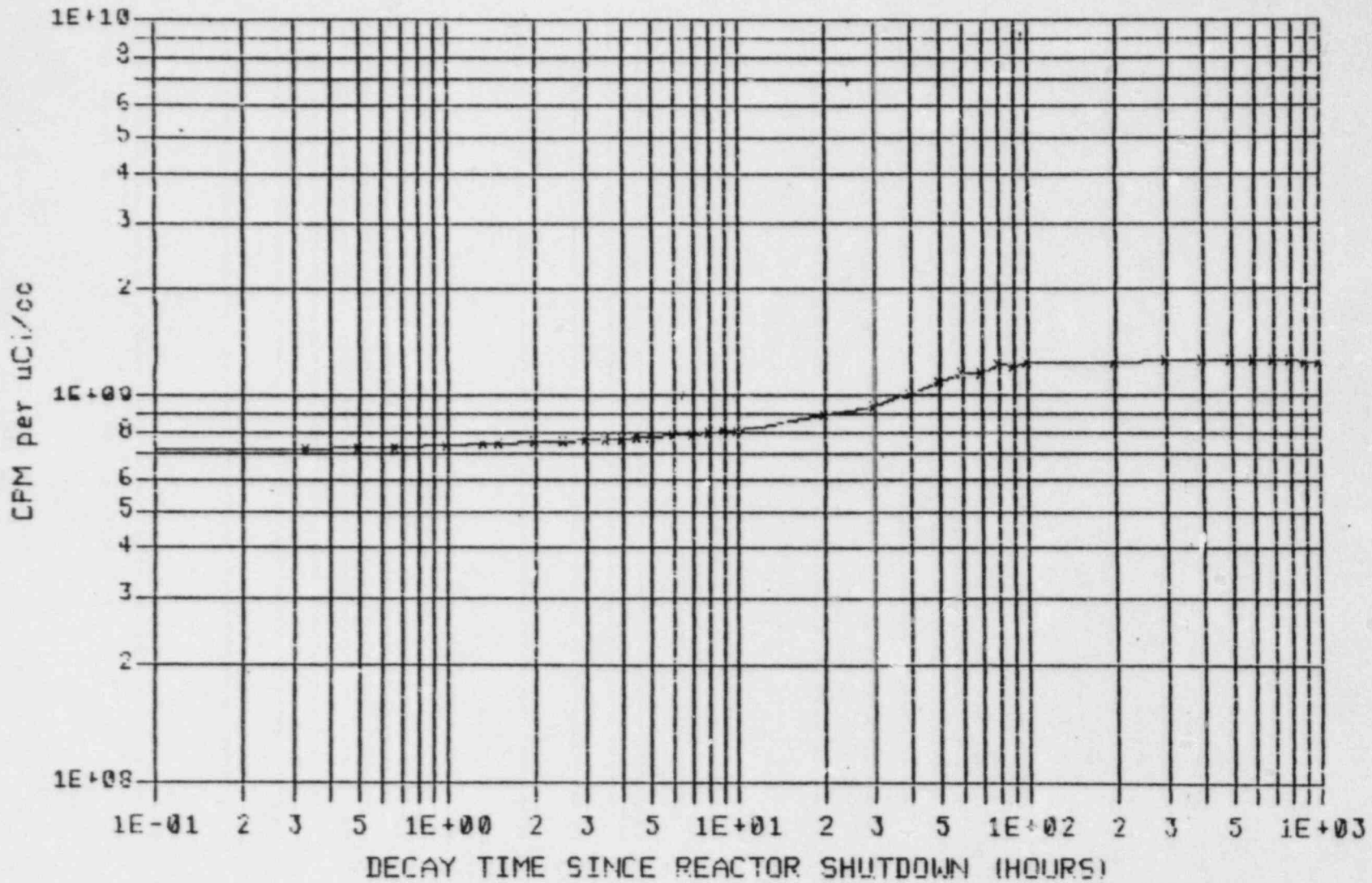
Thyroid Dose: \_\_\_\_\_ mrem at \_\_\_\_\_ miles.

PBAPS: MAIN STACK NORMAL RANGE MONITOR



DMR10 12/20/83

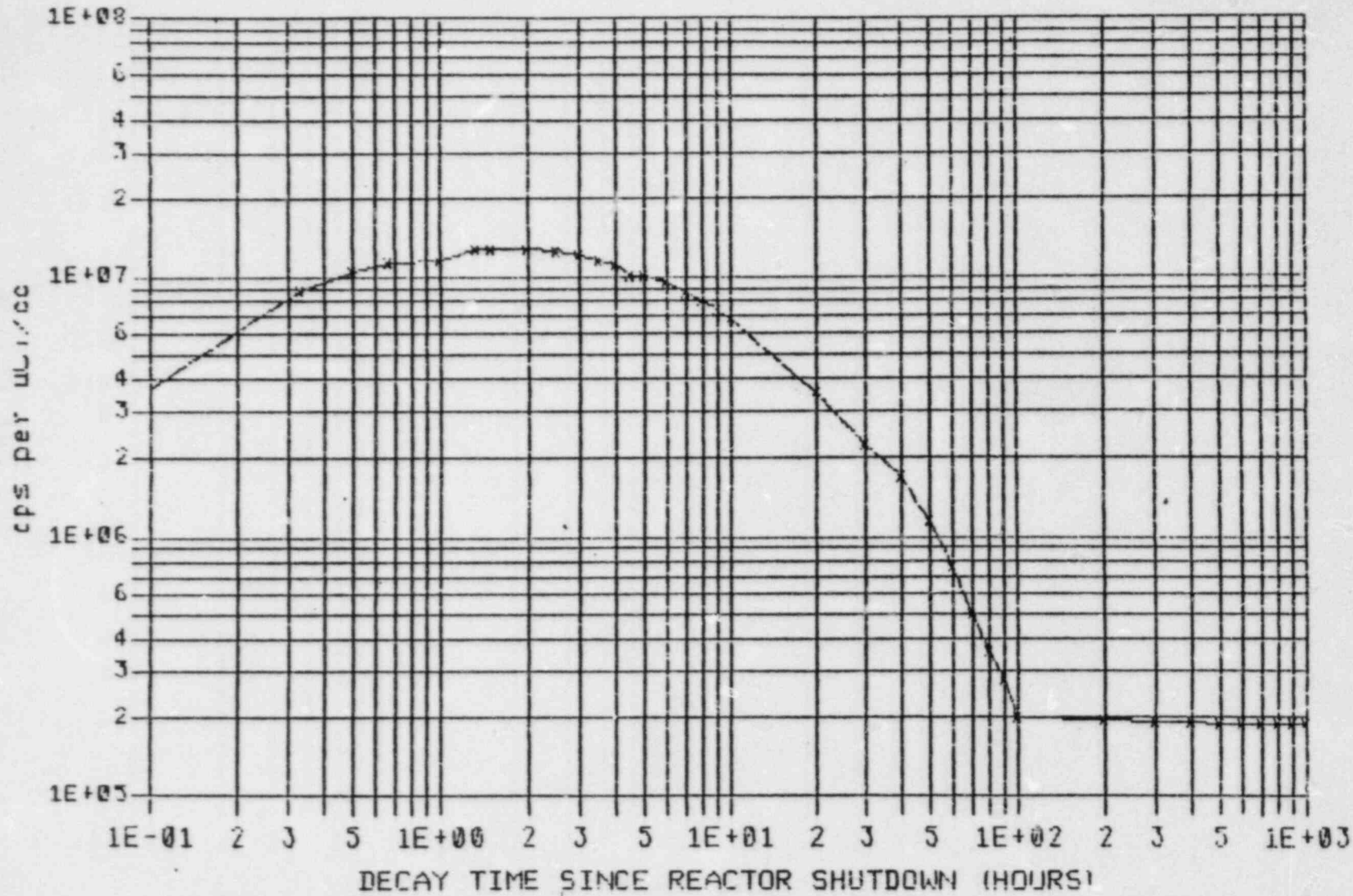
PBAPS: ROOF VENTS 2 AND 3 NORMAL RANGE MONITORS



DMR11 12/20/83

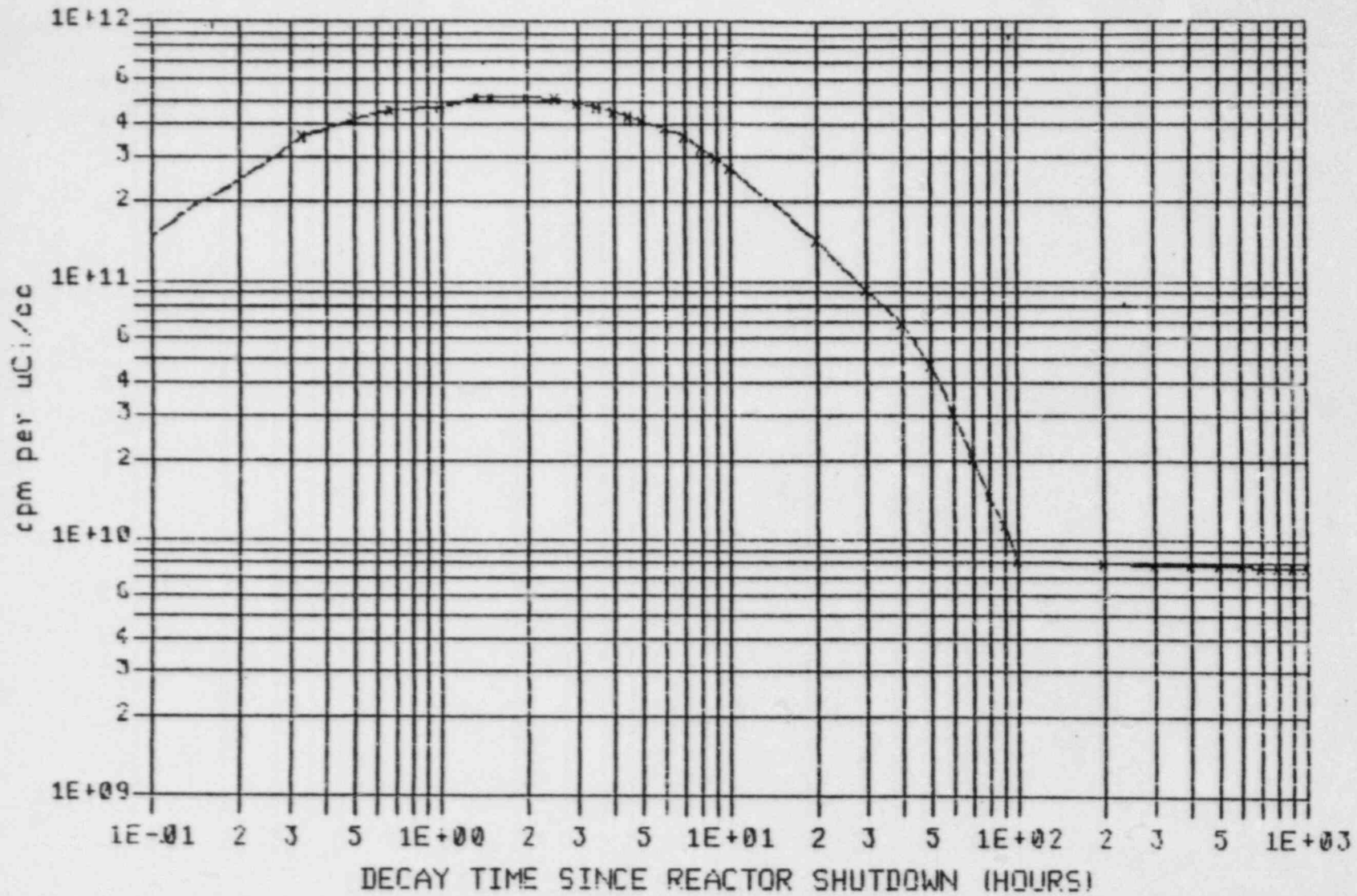


PBAPS - MAIN STACK HIGH RANGE MONITOR



DMR9 12/20/83

PBAPS: ROOF VENTS 7 and 3 HIGH RANGE MONITOR



DMR12 12/20/83

INDEX OF X/Q AND DEPLETED X/Q OUTPUTS  
FOR OFF-GAS STACK RELEASES

LOW FLOW (10,000 cfm, 1 Fan)

| <u>320-Ft. Wind Speed (mph)</u>      |               | <u>Table Number</u> |               |
|--------------------------------------|---------------|---------------------|---------------|
| <u>Range</u>                         | <u>Actual</u> | <u>Unstable</u>     | <u>Stable</u> |
| 0 - 2.0                              | 1.0           | OG-18               | OG-21         |
| 2.1 - 4.0                            | 3.0           | OG-19               | OG-22         |
| 4.1 - 6.0                            | 5.0           | OG-20               | OG-23         |
| 6.1 - 8.5                            | 7.0           | OG-4                | OG-14         |
| 8.6 - 11.5                           | 10.0          | OG-5                | OG-15         |
| 11.6 - 14.5                          | 13.0          | OG-6                | OG-16         |
| 14.6 - 17.9                          | 16.0          | OG-7                | OG-17         |
| <u>All Classes (Neutral Assumed)</u> |               |                     |               |
| 18.0 - 20.0                          | 18.0          | OG-8                |               |
| 20.1 - 24.5                          | 22.0          | OG-9                |               |
| >24.5                                | 27.0          | OG-10               |               |

INDEX OF X/Q AND DEPLETED X/Q OUTPUTS  
FOR OFF-GAS STACK RELEASES

NORMAL FLOW (20,000 cfm, 2 Fans)

| <u>320-Ft. Wind Speed (mph)</u>      |               | <u>Table Number</u> |               |
|--------------------------------------|---------------|---------------------|---------------|
| <u>Range</u>                         | <u>Actual</u> | <u>Unstable</u>     | <u>Stable</u> |
| 0 - 2.0                              | 1.0           | OG-1                | OG-11         |
| 2.1 - 4.0                            | 3.0           | OG-2                | OG-12         |
| 4.1 - 6.0                            | 5.0           | OG-3                | OG-13         |
| 6.1 - 8.5                            | 7.0           | OG-4                | OG-14         |
| 8.6 - 11.5                           | 10.0          | OG-5                | OG-15         |
| 11.6 - 14.5                          | 13.0          | OG-6                | OG-16         |
| 14.6 - 17.9                          | 16.0          | OG-7                | OG-17         |
| <u>All Classes (Neutral Assumed)</u> |               |                     |               |
| 18.0 - 20.9                          | 18.0          | OG-8                |               |
| 20.1 - 24.5                          | 22.0          | OG-9                |               |
| >24.5                                | 27.0          | OG-10               |               |

INDEX OF X/Q AND DEPLETED X/Q OUTPUTS  
FOR OFF-SITE GAS STACK RELEASES

HIGH FLOW (30,000 cfm, 3 Fans)

| 320-Ft. Wind Speed (mph)             |               | Table Number    |               |
|--------------------------------------|---------------|-----------------|---------------|
| <u>Range</u>                         | <u>Actual</u> | <u>Unstable</u> | <u>Stable</u> |
| 0 - 2.0                              | 1.0           | OG-24           | OG-27         |
| 2.1 - 4.0                            | 3.0           | OG-25           | OG-28         |
| 4.1 - 6.0                            | 5.0           | OG-26           | OG-29         |
| 6.1 - 8.5                            | 7.0           | OG-4            | OG-14         |
| 8.6 - 11.5                           | 10.0          | OG-5            | OG-15         |
| 11.6 - 14.5                          | 13.0          | OG-6            | OG-16         |
| 14.6 - 17.9                          | 16.0          | OG-7            | OG-17         |
| <u>All Classes (Neutral Assumed)</u> |               |                 |               |
| 18.0 - 20.0                          | 18.0          |                 | OG-8          |
| 20.1 - 24.5                          | 22.0          |                 | OG-9          |
| >24.5                                | 27.0          |                 | OG-10         |



INDEX OF X/Q AND DEPLETED X/Q OUTPUTS FOR VENT RELEASES

LOW VENT FLOW CONDITIONS (<225,000 cfm)

| <u>75-Ft. Wind Speed (mph)</u>       |               | <u>Table Number</u> |               |
|--------------------------------------|---------------|---------------------|---------------|
| <u>Range</u>                         | <u>Actual</u> | <u>Unstable</u>     | <u>Stable</u> |
| 0 - 2.0                              | 1.0           | V-18                | V-22          |
| 2.1 - 4.0                            | 3.0           | V-19                | V-23          |
| 4.1 - 6.0                            | 5.0           | V-20                | V-24          |
| 6.1 - 7.0                            | 7.0           | V-21                | V-25          |
| 7.1 - 9.0                            | 8.0           | V-5                 | V-16          |
| 9.1 - 11.9                           | 10.0          | V-6                 | V-17          |
| <u>All Classes (Neutral Assumed)</u> |               |                     |               |
| 12.0 - 13.5                          | 12.0          | V-7                 |               |
| 13.6 - 16.5                          | 15.0          | V-8                 |               |
| 16.6 - 20.0                          | 18.0          | V-9                 |               |
| 20.1 - 24.5                          | 22.0          | V-10                |               |
| >24.5                                | 27.0          | V-11                |               |

INDEX OF X/Q AND DEPLETED X/Q OUTPUTS FOR VENT RELEASES

NORMAL VENT FLOW CONDITIONS (225,000 to 300,000 cfm)

| <u>75-Ft. Wind Speed (mph)</u>       |               | <u>Table Number</u> |               |
|--------------------------------------|---------------|---------------------|---------------|
| <u>Range</u>                         | <u>Actual</u> | <u>Unstable</u>     | <u>Stable</u> |
| 0 - 2.0                              | 1.0           | V-1                 | V-12          |
| 2.1 - 4.0                            | 3.0           | V-2                 | V-13          |
| 4.1 - 6.0                            | 5.0           | V-3                 | V-14          |
| 6.1 - 7.0                            | 7.0           | V-4                 | V-15          |
| 7.1 - 9.0                            | 8.0           | V-5                 | V-16          |
| 9.1 - 11.9                           | 10.0          | V-6                 | V-17          |
| <u>All Classes (Neutral Assumed)</u> |               |                     |               |
| 12.0 - 13.5                          | 12.0          |                     | V-7           |
| 13.6 - 16.5                          | 15.0          |                     | V-8           |
| 16.6 - 20.0                          | 18.0          |                     | V-9           |
| 20.1 - 24.5                          | 22.0          |                     | V-10          |
| >24.5                                | 27.0          |                     | V-11          |

INDEX OF X/Q AND DEPLETED X/Q OUTPUTS FOR VENT RELEASES

HIGH VENT FLOW CONDITIONS (>300,000 cfm)

| <u>75-Ft. Wind Speed (mph)</u>       |               | <u>Table Number</u> |               |
|--------------------------------------|---------------|---------------------|---------------|
| <u>Range</u>                         | <u>Actual</u> | <u>Unstable</u>     | <u>Stable</u> |
| 0 - 2.0                              | 1.0           | V-26                | V-30          |
| 2.1 - 4.0                            | 3.0           | V-27                | V-31          |
| 4.1 - 6.0                            | 5.0           | V-28                | V-32          |
| 6.1 - 7.0                            | 7.0           | V-29                | V-33          |
| 7.1 - 9.0                            | 8.0           | V-5                 | V-16          |
| 9.1 - 11.9                           | 10.0          | V-6                 | V-17          |
| <u>All Classes (Neutral Assumed)</u> |               |                     |               |
| 12.0 - 13.5                          | 12.0          | V-7                 |               |
| 13.6 - 16.5                          | 15.0          | V-8                 |               |
| 16.6 - 20.0                          | 18.0          | V-9                 |               |
| 20.1 - 24.5                          | 22.0          | V-10                |               |
| >24.5                                | 27.0          | V-11                |               |



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
STACK RELEASE NORMAL FLOW  
STABILITY UNSTABLE  
SPEED 3. MPH

| ***** WIND DIRECTION RANGES *****    |         |         |         |         |          |          |          |         |          |          |          |          |          |          |         |         |         |
|--------------------------------------|---------|---------|---------|---------|----------|----------|----------|---------|----------|----------|----------|----------|----------|----------|---------|---------|---------|
| 182-                                 | 214-    | 237-    | 259-    | 282-    | 304-     | 327-     | 349-     | 12-     | 34-      | 87-      | 79-      | 102-     | 124-     | 147-     | 169-    |         |         |
| 213                                  | 236     | 258     | 281     | 303     | 328      | 348      | 11       | 33      | 56       | 78       | 101      | 123      | 146      | 168      | 191     |         |         |
| ***** DOWN WIND SECTOR BEARING ***** |         |         |         |         |          |          |          |         |          |          |          |          |          |          |         |         |         |
| NNE                                  | NE      | ENE     | E       | ESE     | SE       | SSE      | S        | SSW     | SW       | WSW      | W        | WNW      | NW       | NNW      | N       |         |         |
| DISTANCE MILES                       |         |         |         |         |          |          |          |         |          |          |          |          |          |          |         |         |         |
| .4                                   | 3.9E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07  | 4.8E-06  | 4.8E-06  | 1.8E-06 | 2.2E-06  | 3.1E-06  | 3.1E-06  | 3.7E-06  | 3.7E-06  | 4.8E-06  | 4.0E-06 | 3.6E-07 |         |
| .4                                   | 5.2E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07  | 5.2E-06  | 5.2E-06  | 2.1E-06 | 3.0E-06  | 3.8E-06  | 3.8E-06  | 4.1E-06  | 4.1E-06  | 5.2E-06  | 4.4E-06 | 4.9E-07 |         |
| .4                                   | 6.6E-07 | 6.2E-07 | 6.2E-07 | 6.2E-07 | 6.2E-07  | 6.2E-06  | 6.2E-06  | 2.4E-06 | 3.3E-06  | 3.8E-06  | 3.8E-06  | 4.4E-06  | 4.4E-06  | 5.5E-06  | 4.7E-06 | 6.2E-07 |         |
| .5                                   | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06  | 6.2E-06  | 6.2E-06  | 5.5E-06 | 4.8E-06* | 4.8E-06  | 3.4E-06  | 5.2E-06  | 5.2E-06  | 6.2E-06  | 5.5E-06 | 1.1E-06 |         |
| .5                                   | 1.3E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06  | 6.3E-06  | 6.3E-06  | 8.0E-06 | 4.8E-06  | 5.3E-06  | 3.6E-06  | 5.3E-06  | 5.3E-06  | 6.3E-06  | 5.6E-06 | 1.2E-06 |         |
| .5                                   | 1.5E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06  | 6.4E-06  | 6.4E-06  | 8.4E-06 | 5.0E-06  | 5.8E-06* | 4.8E-06  | 5.8E-06  | 5.8E-06  | 6.4E-06  | 5.8E-06 | 1.4E-06 |         |
| .5                                   | 1.8E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06  | 8.7E-06  | 7.0E-06  | 7.0E-06 | 8.4E-06  | 6.2E-06  | 6.2E-06* | 5.6E-06  | 5.6E-06* | 6.4E-06  | 5.9E-06 | 1.7E-06 |         |
| .6                                   | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06  | 6.6E-06  | 7.0E-06  | 7.0E-06 | 8.7E-06  | 6.6E-06  | 6.6E-06  | 5.7E-06* | 6.1E-06  | 6.4E-06* | 5.9E-06 | 2.1E-06 |         |
| .6                                   | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06  | 6.3E-06  | 6.7E-06* | 8.7E-06 | 6.0E-06  | 6.3E-06  | 6.5E-06  | 6.6E-06  | 6.3E-06  | 6.1E-06  | 5.7E-06 | 2.7E-06 |         |
| .7                                   | 2.8E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06  | 8.2E-06* | 6.8E-06  | 8.9E-06 | 8.9E-06  | 8.2E-06  | 6.4E-06  | 5.9E-06  | 6.2E-06  | 6.1E-06  | 5.7E-06 | 2.8E-06 |         |
| .7                                   | 2.6E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06* | 8.1E-06  | 6.4E-06  | 6.7E-06 | 6.8E-06  | 6.4E-06  | 6.3E-06  | 6.8E-06  | 6.3E-06  | 6.0E-06  | 5.6E-06 | 2.8E-06 |         |
| 1.0                                  | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06  | 4.8E-06  | 4.8E-06  | 4.8E-06 | 4.8E-06  | 4.8E-06  | 4.8E-06  | 4.8E-06  | 4.8E-06  | 4.8E-06  | 4.8E-06 | 2.8E-06 |         |
| 1.5                                  | 2.0E-06 | 2.4E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06  | 2.6E-06  | 2.6E-06  | 2.6E-06 | 2.7E-06  | 2.8E-06  | 2.6E-06  | 2.6E-06  | 2.7E-06  | 2.6E-06  | 2.6E-06 | 2.9E-06 |         |
| 2.0                                  | 1.6E-06 | 1.6E-06 | 1.7E-06 | 1.7E-06 | 1.4E-06  | 1.7E-06  | 1.7E-06  | 1.7E-06 | 1.7E-06  | 1.7E-06  | 1.7E-06  | 1.7E-06  | 1.7E-06  | 1.7E-06  | 1.7E-06 | 1.4E-06 |         |
| 2.5                                  | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.1E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06 | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06 | 1.1E-06 |         |
| 3.0                                  | 8.8E-07 | 8.7E-07 | 8.7E-07 | 8.6E-07 | 8.6E-07  | 8.6E-07  | 8.6E-07  | 8.7E-07 | 8.7E-07  | 8.9E-07  | 8.8E-07  | 8.7E-07  | 8.7E-07  | 8.8E-07  | 8.7E-07 | 8.8E-07 |         |
| 3.5                                  | 6.8E-07 | 6.8E-07 | 6.7E-07 | 6.7E-07 | 6.7E-07  | 6.7E-07  | 6.7E-07  | 6.7E-07 | 6.7E-07  | 6.8E-07  | 6.8E-07  | 6.7E-07  | 6.7E-07  | 6.8E-07  | 6.8E-07 | 6.8E-07 |         |
| 4.0                                  | 5.4E-07 | 5.4E-07 | 5.4E-07 | 5.4E-07 | 5.4E-07  | 5.3E-07  | 5.4E-07  | 5.4E-07 | 5.4E-07  | 5.8E-07  | 5.4E-07  | 5.4E-07  | 5.4E-07  | 5.4E-07  | 5.4E-07 | 5.4E-07 |         |
| 4.5                                  | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07  | 4.4E-07  | 4.4E-07  | 4.4E-07 | 4.4E-07  | 4.8E-07  | 4.4E-07  | 4.4E-07  | 4.4E-07  | 4.4E-07  | 4.4E-07 | 4.5E-07 |         |
| 5.0                                  | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07  | 3.7E-07  | 3.7E-07  | 3.7E-07 | 3.7E-07  | 3.7E-07  | 3.7E-07  | 3.7E-07  | 3.7E-07  | 3.7E-07  | 3.7E-07 | 3.7E-07 |         |
| 6.0                                  | 2.7E-07 | 2.7E-07 | 2.7E-07 | 2.7E-07 | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07 | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07 | 2.7E-07 |         |
| 7.0                                  | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07  | 2.1E-07  | 2.1E-07  | 2.1E-07 | 2.1E-07  | 2.1E-07  | 2.1E-07  | 2.1E-07  | 2.1E-07  | 2.1E-07  | 2.1E-07 | 2.1E-07 |         |
| 8.0                                  | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07 | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07 | 1.7E-07 |         |
| 9.0                                  | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07  | 1.4E-07  | 1.4E-07  | 1.4E-07 | 1.4E-07  | 1.4E-07  | 1.4E-07  | 1.4E-07  | 1.4E-07  | 1.4E-07  | 1.4E-07 | 1.4E-07 |         |
| 10.0                                 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07  | 1.1E-07  | 1.1E-07  | 1.1E-07 | 1.1E-07  | 1.1E-07  | 1.1E-07  | 1.1E-07  | 1.1E-07  | 1.1E-07  | 1.1E-07 | 1.1E-07 |         |
| 15.0                                 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08  | 5.7E-08  | 5.7E-08  | 5.7E-08 | 5.7E-08  | 5.7E-08  | 5.7E-08  | 5.7E-08  | 5.7E-08  | 5.7E-08  | 5.7E-08 | 5.7E-08 |         |
| 20.0                                 | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08 | 3.5E-08  | 3.5E-08  | 3.5E-08  | 3.5E-08  | 3.5E-08  | 3.5E-08  | 3.5E-08 | 3.5E-08 |         |
| 25.0                                 | 2.4E-08 | 2.4E-08 | 2.4E-08 | 2.4E-08 | 2.4E-08  | 2.4E-08  | 2.4E-08  | 2.4E-08 | 2.4E-08  | 2.4E-08  | 2.4E-08  | 2.4E-08  | 2.4E-08  | 2.4E-08  | 2.4E-08 | 2.4E-08 |         |
| 30.0                                 | 1.7E-08 | 1.7E-08 | 1.7E-08 | 1.7E-08 | 1.7E-08  | 1.7E-08  | 1.7E-08  | 1.7E-08 | 1.7E-08  | 1.7E-08  | 1.7E-08  | 1.7E-08  | 1.7E-08  | 1.7E-08  | 1.7E-08 | 1.7E-08 |         |
| 40.0                                 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08 | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08 | 1.0E-08 |         |
| 50.0                                 | 7.2E-09 | 7.2E-09 | 7.2E-09 | 7.2E-09 | 7.2E-09  | 7.2E-09  | 7.2E-09  | 7.2E-09 | 7.2E-09  | 7.2E-09  | 7.2E-09  | 7.2E-09  | 7.2E-09  | 7.2E-09  | 7.2E-09 | 7.2E-09 |         |
| MAX                                  | COND    | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06  | 2.7E-06  | 6.7E-06  | 7.0E-06 | 7.0E-06  | 8.9E-06  | 6.6E-06  | 6.6E-06  | 5.9E-06  | 6.3E-06  | 6.4E-06 | 5.9E-06 | 2.9E-06 |
| DIST(MI)                             | 1.0     | 1.0     | 1.0     | 1.0     | 1.0      | .5       | .6       | .6      | .7       | .6       | .6       | .7       | .6       | .5       | .6      | 1.0     |         |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00- 2



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
STACK RELEASE NORMAL FLOW  
STABILITY UNSTABLE  
SPEED 8. MPH

| WIND DIRECTION RANGES |      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|-----------------------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192-                  | 214- | 237- | 259- | 282- | 304- | 327- | 349- | 12- | 34- | 57- | 79- | 102- | 124- | 147- | 169- |
| 213                   | 236  | 258  | 281  | 303  | 326  | 348  | 11   | 33  | 56  | 78  | 101 | 123  | 146  | 168  | 191  |

| DOWN WIND SECTOR BEARING |    |     |   |     |    |     |   |     |    |     |   |     |    |     |   |
|--------------------------|----|-----|---|-----|----|-----|---|-----|----|-----|---|-----|----|-----|---|
| NNE                      | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | MNW | NW | NNW | N |

| DISTANCE<br>MILES | NNE      | NE       | ENE      | E        | ESE      | SE       | SSE      | S        | SSW      | SW       | WSW      | W        | MNW      | NW      | NNW      | N       |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|----------|---------|
| .4                | 4.3E-07* | 4.0E-07* | 4.0E-07  | 4.0E-07  | 4.0E-07  | 4.3E-06  | 4.0E-06  | 1.8E-06  | 2.1E-06  | 2.9E-06  | 2.9E-06  | 3.4E-06  | 3.4E-06  | 4.3E-06 | 3.7E-06  | 4.0E-07 |
| .4                | 5.5E-07  | 5.2E-07  | 5.2E-07* | 5.2E-07  | 5.2E-07  | 4.5E-06  | 4.5E-06  | 2.0E-06  | 2.8E-06  | 3.2E-06  | 3.2E-06  | 3.6E-06  | 3.6E-06  | 4.5E-06 | 3.9E-06  | 5.2E-07 |
| .4*               | 6.7E-07  | 6.3E-07  | 6.3E-07  | 6.3E-07  | 6.3E-07  | 4.7E-06  | 4.7E-06  | 2.2E-06  | 3.0E-06  | 3.4E-06  | 3.4E-06  | 3.8E-06  | 3.8E-06  | 4.7E-06 | 4.1E-06* | 6.3E-07 |
| .5                | 1.0E-06  | 9.9E-07  | 9.9E-07  | 9.9E-07  | 9.9E-07  | 4.9E-06  | 4.9E-06  | 4.4E-06  | 3.8E-06* | 3.9E-06  | 2.9E-06  | 4.1E-06  | 4.1E-06  | 4.9E-06 | 4.4E-06  | 9.9E-07 |
| .5                | 1.2E-06  | 1.1E-06  | 1.1E-06  | 1.1E-06* | 1.1E-06  | 4.9E-06  | 4.9E-06  | 4.7E-06  | 3.8E-06  | 4.2E-06  | 3.0E-06  | 4.2E-06  | 4.2E-06  | 4.2E-06 | 4.9E-06  | 1.1E-06 |
| .5                | 1.3E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 4.8E-06  | 4.8E-06  | 4.8E-06  | 3.9E-06  | 4.2E-06* | 3.5E-06  | 4.2E-06  | 4.2E-06  | 4.8E-06 | 4.4E-06  | 1.2E-06 |
| .5                | 1.5E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06  | 4.9E-06  | 5.1E-06  | 5.1E-06  | 4.1E-06  | 4.6E-06  | 4.6E-06* | 4.2E-06  | 4.2E-06* | 4.3E-06 | 4.4E-06  | 1.4E-06 |
| .6                | 1.7E-06  | 1.6E-06  | 1.6E-06  | 1.6E-06  | 1.6E-06  | 4.7E-06  | 4.6E-06  | 4.9E-06* | 4.1E-06  | 4.7E-06  | 4.7E-06  | 4.1E-06* | 4.1E-06* | 4.4E-06 | 4.5E-06* | 4.2E-06 |
| .6                | 1.8E-06  | 1.8E-06  | 1.8E-06  | 1.8E-06  | 1.8E-06  | 4.4E-06  | 4.6E-06* | 4.6E-06  | 4.2E-06  | 4.4E-06  | 4.5E-06  | 3.9E-06  | 4.4E-06  | 4.4E-06 | 4.3E-06  | 4.0E-06 |
| .7                | 1.9E-06  | 1.8E-06  | 1.8E-06  | 1.8E-06  | 1.8E-06  | 4.3E-06* | 4.5E-06  | 4.7E-06  | 4.1E-06  | 4.3E-06  | 4.4E-06  | 4.1E-06  | 4.3E-06  | 4.2E-06 | 3.9E-06  | 2.0E-06 |
| .7                | 1.9E-06  | 1.9E-06  | 1.9E-06  | 1.9E-06  | 1.9E-06* | 4.2E-06  | 4.4E-06  | 4.8E-06  | 4.7E-06  | 4.4E-06  | 4.4E-06  | 4.0E-06  | 4.3E-06  | 4.2E-06 | 3.9E-06  | 2.1E-06 |
| 1.0               | 1.8E-06  | 1.8E-06  | 1.8E-06  | 1.8E-06  | 1.8E-06  | 2.9E-06  | 2.9E-06  | 2.9E-06  | 2.9E-06  | 3.0E-06  | 2.5E-06  | 2.8E-06  | 2.8E-06  | 2.8E-06 | 2.8E-06  | 1.8E-06 |
| 1.5               | 1.3E-06  | 1.5E-06  | 1.3E-06  | 1.3E-06  | 1.3E-06  | 1.6E-06  | 1.6E-06  | 1.6E-06  | 1.7E-06  | 1.8E-06  | 1.6E-06  | 1.6E-06  | 1.6E-06  | 1.6E-06 | 1.6E-06  | 1.3E-06 |
| 2.0               | 9.9E-07  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 8.8E-07  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06 | 1.0E-06  | 9.0E-07 |
| 2.5               | 7.2E-07  | 7.1E-07  | 7.1E-07  | 7.0E-07  | 6.8E-07  | 7.1E-07  | 7.1E-07  | 7.1E-07  | 7.2E-07  | 7.2E-07  | 7.2E-07  | 7.1E-07  | 7.2E-07  | 7.2E-07 | 7.0E-07  | 7.0E-07 |
| 3.0               | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.2E-07  | 5.2E-07  | 5.2E-07  | 5.2E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07 | 5.2E-07  | 5.3E-07 |
| 3.5               | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.0E-07  | 4.0E-07  | 4.0E-07  | 4.0E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07 | 4.1E-07  | 4.1E-07 |
| 4.0               | 3.3E-07  | 3.3E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07 | 3.2E-07  | 3.2E-07 |
| 4.5               | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.6E-07  | 2.6E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07 | 2.7E-07  | 2.7E-07 |
| 5.0               | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07 | 2.2E-07  | 2.2E-07 |
| 6.0               | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07 | 1.6E-07  | 1.6E-07 |
| 7.0               | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07 | 1.3E-07  | 1.3E-07 |
| 8.0               | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07 | 1.0E-07  | 1.0E-07 |
| 9.0               | 8.2E-08  | 8.2E-08  | 8.2E-08  | 8.1E-08  | 8.1E-08  | 8.1E-08  | 8.1E-08  | 8.1E-08  | 8.1E-08  | 8.2E-08  | 8.2E-08  | 8.2E-08  | 8.2E-08  | 8.2E-08 | 8.2E-08  | 8.2E-08 |
| 10.0              | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08 | 6.8E-08  | 6.8E-08 |
| 15.0              | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08 | 3.4E-08  | 3.4E-08 |
| 20.0              | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08 | 2.1E-08  | 2.1E-08 |
| 25.0              | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08 | 1.4E-08  | 1.4E-08 |
| 30.0              | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08 | 1.0E-08  | 1.0E-08 |
| 40.0              | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09 | 6.3E-09  | 6.3E-09 |
| 50.0              | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09 | 4.3E-09  | 4.3E-09 |

| MAX<br>CONC | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 4.9E-06 | 5.1E-06 | 5.1E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.2E-06 | 4.4E-06 | 4.9E-06 | 4.4E-06 | 2.1E-06 |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| DIST(MI)    | .7      | .7      | .7      | .7      | .7      | .8      | .8      | .8      | .7      | .8      | .8      | .8      | .6      | .5      | .5      | .7      |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-3









PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
STACK RELEASE NORMAL FLOW  
STABILITY UNSTABLE  
SPEED 16. MPH

| RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE         | WIND DIRECTION RANGES                | WIND SPEED | STABILITY | CHI/O   |
|---|--------------------------------------|------------|-----------|---------|
| 192- 214- 237- 259- 282- 304- 327- 348- 12- 34- 57- 78- 102- 124- 147- 169- | 348- 11 33 55 78 101 123 146 168 181 | 16. MPH    | UNSTABLE  | 16. MPH |

DOWN WIND SECTOR BEARING

| DOWN WIND SECTOR BEARING | SSE      | SE       | ESE      | E        | ESE      | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N        |
|--------------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| 1 2.1E-07                | 2.0E-07  | 2.0E-07  | 2.0E-07  | 2.0E-07  | 2.0E-07  | 1.8E-06 | 1.7E-06 | 8.0E-07 | 8.4E-07 | 1.3E-06 | 1.3E-06 | 1.4E-06 | 1.4E-06 | 1.8E-06 | 1.8E-06 | 2.0E-07  |
| 2 2.4E-07                | 2.4E-07  | 2.4E-07  | 2.4E-07  | 2.4E-07  | 2.4E-07  | 1.8E-06 | 1.8E-06 | 8.8E-07 | 1.2E-06 | 1.3E-06 | 1.3E-06 | 1.4E-06 | 1.4E-06 | 1.8E-06 | 1.8E-06 | 2.4E-07  |
| 3 2.8E-07                | 2.8E-07  | 2.8E-07  | 2.8E-07  | 2.8E-07  | 2.8E-07  | 1.8E-06 | 1.8E-06 | 9.4E-07 | 1.2E-06 | 1.4E-06 | 1.4E-06 | 1.5E-06 | 1.5E-06 | 1.9E-06 | 1.9E-06 | 2.8E-07  |
| 4 3.2E-07                | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.2E-07  | 1.8E-06 | 1.8E-06 | 1.7E-06 | 1.4E-06 | 1.6E-06 | 1.6E-06 | 1.7E-06 | 1.7E-06 | 2.1E-06 | 2.1E-06 | 3.2E-07  |
| 5 3.6E-07                | 3.6E-07  | 3.6E-07  | 3.6E-07  | 3.6E-07  | 3.6E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.5E-06 | 1.7E-06 | 1.7E-06 | 1.8E-06 | 1.8E-06 | 2.2E-06 | 2.2E-06 | 3.6E-07  |
| 6 4.0E-07                | 4.0E-07  | 4.0E-07  | 4.0E-07  | 4.0E-07  | 4.0E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.6E-06 | 1.8E-06 | 1.8E-06 | 1.9E-06 | 1.9E-06 | 2.3E-06 | 2.3E-06 | 4.0E-07  |
| 7 4.4E-07                | 4.4E-07  | 4.4E-07  | 4.4E-07  | 4.4E-07  | 4.4E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.7E-06 | 1.9E-06 | 1.9E-06 | 2.0E-06 | 2.0E-06 | 2.4E-06 | 2.4E-06 | 4.4E-07  |
| 8 4.8E-07                | 4.8E-07  | 4.8E-07  | 4.8E-07  | 4.8E-07  | 4.8E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 2.0E-06 | 2.0E-06 | 2.1E-06 | 2.1E-06 | 2.5E-06 | 2.5E-06 | 4.8E-07  |
| 9 5.2E-07                | 5.2E-07  | 5.2E-07  | 5.2E-07  | 5.2E-07  | 5.2E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 2.1E-06 | 2.1E-06 | 2.2E-06 | 2.2E-06 | 2.6E-06 | 2.6E-06 | 5.2E-07  |
| 10 5.6E-07               | 5.6E-07  | 5.6E-07  | 5.6E-07  | 5.6E-07  | 5.6E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 2.2E-06 | 2.2E-06 | 2.3E-06 | 2.3E-06 | 2.7E-06 | 2.7E-06 | 5.6E-07  |
| 11 6.0E-07               | 6.0E-07  | 6.0E-07  | 6.0E-07  | 6.0E-07  | 6.0E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 2.3E-06 | 2.3E-06 | 2.4E-06 | 2.4E-06 | 2.8E-06 | 2.8E-06 | 6.0E-07  |
| 12 6.4E-07               | 6.4E-07  | 6.4E-07  | 6.4E-07  | 6.4E-07  | 6.4E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 2.4E-06 | 2.4E-06 | 2.5E-06 | 2.5E-06 | 2.9E-06 | 2.9E-06 | 6.4E-07  |
| 13 6.8E-07               | 6.8E-07  | 6.8E-07  | 6.8E-07  | 6.8E-07  | 6.8E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 2.5E-06 | 2.5E-06 | 2.6E-06 | 2.6E-06 | 3.0E-06 | 3.0E-06 | 6.8E-07  |
| 14 7.2E-07               | 7.2E-07  | 7.2E-07  | 7.2E-07  | 7.2E-07  | 7.2E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 2.6E-06 | 2.6E-06 | 2.7E-06 | 2.7E-06 | 3.1E-06 | 3.1E-06 | 7.2E-07  |
| 15 7.6E-07               | 7.6E-07  | 7.6E-07  | 7.6E-07  | 7.6E-07  | 7.6E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 2.7E-06 | 2.7E-06 | 2.8E-06 | 2.8E-06 | 3.2E-06 | 3.2E-06 | 7.6E-07  |
| 16 8.0E-07               | 8.0E-07  | 8.0E-07  | 8.0E-07  | 8.0E-07  | 8.0E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 2.8E-06 | 2.8E-06 | 2.9E-06 | 2.9E-06 | 3.3E-06 | 3.3E-06 | 8.0E-07  |
| 17 8.4E-07               | 8.4E-07  | 8.4E-07  | 8.4E-07  | 8.4E-07  | 8.4E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 2.9E-06 | 2.9E-06 | 3.0E-06 | 3.0E-06 | 3.4E-06 | 3.4E-06 | 8.4E-07  |
| 18 8.8E-07               | 8.8E-07  | 8.8E-07  | 8.8E-07  | 8.8E-07  | 8.8E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.0E-06 | 3.0E-06 | 3.1E-06 | 3.1E-06 | 3.5E-06 | 3.5E-06 | 8.8E-07  |
| 19 9.2E-07               | 9.2E-07  | 9.2E-07  | 9.2E-07  | 9.2E-07  | 9.2E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.1E-06 | 3.1E-06 | 3.2E-06 | 3.2E-06 | 3.6E-06 | 3.6E-06 | 9.2E-07  |
| 20 9.6E-07               | 9.6E-07  | 9.6E-07  | 9.6E-07  | 9.6E-07  | 9.6E-07  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.2E-06 | 3.2E-06 | 3.3E-06 | 3.3E-06 | 3.7E-06 | 3.7E-06 | 9.6E-07  |
| 21 1.0E-06               | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.3E-06 | 3.3E-06 | 3.4E-06 | 3.4E-06 | 3.8E-06 | 3.8E-06 | 1.0E-06  |
| 22 1.04E-06              | 1.04E-06 | 1.04E-06 | 1.04E-06 | 1.04E-06 | 1.04E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.4E-06 | 3.4E-06 | 3.5E-06 | 3.5E-06 | 3.9E-06 | 3.9E-06 | 1.04E-06 |
| 23 1.08E-06              | 1.08E-06 | 1.08E-06 | 1.08E-06 | 1.08E-06 | 1.08E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.5E-06 | 3.5E-06 | 3.6E-06 | 3.6E-06 | 4.0E-06 | 4.0E-06 | 1.08E-06 |
| 24 1.12E-06              | 1.12E-06 | 1.12E-06 | 1.12E-06 | 1.12E-06 | 1.12E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.6E-06 | 3.6E-06 | 3.7E-06 | 3.7E-06 | 4.1E-06 | 4.1E-06 | 1.12E-06 |
| 25 1.16E-06              | 1.16E-06 | 1.16E-06 | 1.16E-06 | 1.16E-06 | 1.16E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.7E-06 | 3.7E-06 | 3.8E-06 | 3.8E-06 | 4.2E-06 | 4.2E-06 | 1.16E-06 |
| 26 1.2E-06               | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.8E-06 | 3.8E-06 | 3.9E-06 | 3.9E-06 | 4.3E-06 | 4.3E-06 | 1.2E-06  |
| 27 1.24E-06              | 1.24E-06 | 1.24E-06 | 1.24E-06 | 1.24E-06 | 1.24E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.9E-06 | 3.9E-06 | 4.0E-06 | 4.0E-06 | 4.4E-06 | 4.4E-06 | 1.24E-06 |
| 28 1.28E-06              | 1.28E-06 | 1.28E-06 | 1.28E-06 | 1.28E-06 | 1.28E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.0E-06 | 4.0E-06 | 4.1E-06 | 4.1E-06 | 4.5E-06 | 4.5E-06 | 1.28E-06 |
| 29 1.32E-06              | 1.32E-06 | 1.32E-06 | 1.32E-06 | 1.32E-06 | 1.32E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.1E-06 | 4.1E-06 | 4.2E-06 | 4.2E-06 | 4.6E-06 | 4.6E-06 | 1.32E-06 |
| 30 1.36E-06              | 1.36E-06 | 1.36E-06 | 1.36E-06 | 1.36E-06 | 1.36E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.2E-06 | 4.2E-06 | 4.3E-06 | 4.3E-06 | 4.7E-06 | 4.7E-06 | 1.36E-06 |
| 31 1.4E-06               | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.3E-06 | 4.3E-06 | 4.4E-06 | 4.4E-06 | 4.8E-06 | 4.8E-06 | 1.4E-06  |
| 32 1.44E-06              | 1.44E-06 | 1.44E-06 | 1.44E-06 | 1.44E-06 | 1.44E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.4E-06 | 4.4E-06 | 4.5E-06 | 4.5E-06 | 4.9E-06 | 4.9E-06 | 1.44E-06 |
| 33 1.48E-06              | 1.48E-06 | 1.48E-06 | 1.48E-06 | 1.48E-06 | 1.48E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.5E-06 | 4.5E-06 | 4.6E-06 | 4.6E-06 | 5.0E-06 | 5.0E-06 | 1.48E-06 |
| 34 1.52E-06              | 1.52E-06 | 1.52E-06 | 1.52E-06 | 1.52E-06 | 1.52E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.6E-06 | 4.6E-06 | 4.7E-06 | 4.7E-06 | 5.1E-06 | 5.1E-06 | 1.52E-06 |
| 35 1.56E-06              | 1.56E-06 | 1.56E-06 | 1.56E-06 | 1.56E-06 | 1.56E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.7E-06 | 4.7E-06 | 4.8E-06 | 4.8E-06 | 5.2E-06 | 5.2E-06 | 1.56E-06 |
| 36 1.6E-06               | 1.6E-06  | 1.6E-06  | 1.6E-06  | 1.6E-06  | 1.6E-06  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.8E-06 | 4.8E-06 | 4.9E-06 | 4.9E-06 | 5.3E-06 | 5.3E-06 | 1.6E-06  |
| 37 1.64E-06              | 1.64E-06 | 1.64E-06 | 1.64E-06 | 1.64E-06 | 1.64E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.9E-06 | 4.9E-06 | 5.0E-06 | 5.0E-06 | 5.4E-06 | 5.4E-06 | 1.64E-06 |
| 38 1.68E-06              | 1.68E-06 | 1.68E-06 | 1.68E-06 | 1.68E-06 | 1.68E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 5.0E-06 | 5.0E-06 | 5.1E-06 | 5.1E-06 | 5.5E-06 | 5.5E-06 | 1.68E-06 |
| 39 1.72E-06              | 1.72E-06 | 1.72E-06 | 1.72E-06 | 1.72E-06 | 1.72E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 5.1E-06 | 5.1E-06 | 5.2E-06 | 5.2E-06 | 5.6E-06 | 5.6E-06 | 1.72E-06 |
| 40 1.76E-06              | 1.76E-06 | 1.76E-06 | 1.76E-06 | 1.76E-06 | 1.76E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 5.2E-06 | 5.2E-06 | 5.3E-06 | 5.3E-06 | 5.7E-06 | 5.7E-06 | 1.76E-06 |
| 41 1.8E-06               | 1.8E-06  | 1.8E-06  | 1.8E-06  | 1.8E-06  | 1.8E-06  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 5.3E-06 | 5.3E-06 | 5.4E-06 | 5.4E-06 | 5.8E-06 | 5.8E-06 | 1.8E-06  |
| 42 1.84E-06              | 1.84E-06 | 1.84E-06 | 1.84E-06 | 1.84E-06 | 1.84E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 5.4E-06 | 5.4E-06 | 5.5E-06 | 5.5E-06 | 5.9E-06 | 5.9E-06 | 1.84E-06 |
| 43 1.88E-06              | 1.88E-06 | 1.88E-06 | 1.88E-06 | 1.88E-06 | 1.88E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 5.5E-06 | 5.5E-06 | 5.6E-06 | 5.6E-06 | 6.0E-06 | 6.0E-06 | 1.88E-06 |
| 44 1.92E-06              | 1.92E-06 | 1.92E-06 | 1.92E-06 | 1.92E-06 | 1.92E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 5.6E-06 | 5.6E-06 | 5.7E-06 | 5.7E-06 | 6.1E-06 | 6.1E-06 | 1.92E-06 |
| 45 1.96E-06              | 1.96E-06 | 1.96E-06 | 1.96E-06 | 1.96E-06 | 1.96E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 5.7E-06 | 5.7E-06 | 5.8E-06 | 5.8E-06 | 6.2E-06 | 6.2E-06 | 1.96E-06 |
| 46 2.0E-06               | 2.0E-06  | 2.0E-06  | 2.0E-06  | 2.0E-06  | 2.0E-06  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 5.8E-06 | 5.8E-06 | 5.9E-06 | 5.9E-06 | 6.3E-06 | 6.3E-06 | 2.0E-06  |
| 47 2.04E-06              | 2.04E-06 | 2.04E-06 | 2.04E-06 | 2.04E-06 | 2.04E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 5.9E-06 | 5.9E-06 | 6.0E-06 | 6.0E-06 | 6.4E-06 | 6.4E-06 | 2.04E-06 |
| 48 2.08E-06              | 2.08E-06 | 2.08E-06 | 2.08E-06 | 2.08E-06 | 2.08E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 6.0E-06 | 6.0E-06 | 6.1E-06 | 6.1E-06 | 6.5E-06 | 6.5E-06 | 2.08E-06 |
| 49 2.12E-06              | 2.12E-06 | 2.12E-06 | 2.12E-06 | 2.12E-06 | 2.12E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 6.1E-06 | 6.1E-06 | 6.2E-06 | 6.2E-06 | 6.6E-06 | 6.6E-06 | 2.12E-06 |
| 50 2.16E-06              | 2.16E-06 | 2.16E-06 | 2.16E-06 | 2.16E-06 | 2.16E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 6.2E-06 | 6.2E-06 | 6.3E-06 | 6.3E-06 | 6.7E-06 | 6.7E-06 | 2.1      |







PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
STACK RELEASE NORMAL FLOW  
STABILITY NEUTRAL  
SPEED 27. MPH

WIND DIRECTION RANGES  
34- 34- 78- 78- 101- 101- 124- 124- 147- 147- 168- 168- 181- 181-

| DISTANCE<br>MILES | NNE      | NE      | E       | ESE     | SE      | SSE     | S        | SSW     | SW      | WSW     | W       | WNW     | NNW     | N        |
|-------------------|----------|---------|---------|---------|---------|---------|----------|---------|---------|---------|---------|---------|---------|----------|
| 4                 | 3.0E-14* | 1.3E-14 | 1.3E-14 | 1.3E-14 | 8.5E-09 | 5.4E-09 | 6.4E-11  | 1.7E-10 | 9.9E-10 | 9.9E-10 | 2.3E-09 | 2.3E-09 | 8.5E-09 | 3.4E-09  |
| 4                 | 9.0E-14  | 6.1E-14 | 6.1E-14 | 6.1E-14 | 1.4E-08 | 1.4E-08 | 1.6E-10  | 8.7E-10 | 2.0E-09 | 2.0E-09 | 4.2E-09 | 4.2E-09 | 1.4E-08 | 6.1E-08  |
| 4                 | 3.3E-13  | 2.3E-13 | 2.3E-13 | 2.3E-13 | 2.2E-08 | 2.2E-08 | 3.3E-10  | 1.6E-09 | 3.9E-09 | 3.9E-09 | 7.1E-09 | 7.1E-09 | 2.2E-08 | 1.0E-08* |
| 5                 | 7.4E-12  | 5.5E-12 | 5.5E-12 | 5.5E-12 | 6.1E-08 | 6.1E-08 | 1.4E-08  | 1.8E-08 | 2.4E-08 | 2.4E-08 | 3.4E-08 | 3.4E-08 | 6.1E-08 | 3.2E-08  |
| 5                 | 1.6E-11  | 1.3E-11 | 1.3E-11 | 1.3E-11 | 7.0E-08 | 7.0E-08 | 1.9E-08  | 3.3E-08 | 4.4E-08 | 4.4E-08 | 3.3E-08 | 3.3E-08 | 7.0E-08 | 4.4E-08  |
| 5                 | 3.4E-11  | 2.6E-11 | 2.6E-11 | 2.6E-11 | 8.5E-08 | 8.5E-08 | 2.5E-08  | 4.4E-08 | 4.4E-08 | 4.4E-08 | 4.4E-08 | 4.4E-08 | 8.5E-08 | 5.7E-08  |
| 5                 | 1.2E-10  | 9.6E-11 | 9.6E-11 | 9.6E-11 | 1.8E-07 | 1.8E-07 | 2.2E-07  | 5.7E-08 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.8E-07 | 1.5E-07  |
| 6                 | 5.4E-10  | 4.4E-10 | 4.4E-10 | 4.4E-10 | 2.8E-07 | 2.8E-07 | 3.9E-07* | 1.2E-07 | 2.8E-07 | 2.8E-07 | 4.4E-07 | 4.4E-07 | 1.2E-07 | 3.9E-07  |
| 6                 | 1.7E-09  | 1.4E-09 | 1.4E-09 | 1.4E-09 | 3.8E-07 | 3.8E-07 | 5.1E-07  | 1.7E-07 | 3.8E-07 | 3.8E-07 | 5.1E-07 | 5.1E-07 | 1.7E-07 | 3.8E-07  |
| 7                 | 3.1E-09  | 2.7E-09 | 2.7E-09 | 2.7E-09 | 4.1E-07 | 4.1E-07 | 5.4E-07  | 1.8E-07 | 4.1E-07 | 4.1E-07 | 5.4E-07 | 5.4E-07 | 1.8E-07 | 4.1E-09  |
| 1.0               | 5.3E-08  | 4.8E-08 | 4.8E-08 | 4.8E-08 | 1.1E-06 | 1.1E-06 | 1.2E-06  | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.1E-06 | 7.1E-08  |
| 1.5               | 2.0E-07  | 1.7E-07 | 1.7E-07 | 1.7E-07 | 2.0E-07 | 2.0E-07 | 1.0E-06  | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.0E-06 | 7.1E-08  |
| 2.0               | 7.1E-07  | 6.0E-07 | 6.0E-07 | 6.0E-07 | 8.2E-07 | 8.2E-07 | 3.5E-07  | 1.0E-06 | 8.2E-07 | 8.2E-07 | 1.0E-06 | 1.0E-06 | 3.5E-07 | 2.4E-07  |
| 2.5               | 7.6E-07  | 6.8E-07 | 6.8E-07 | 6.8E-07 | 8.2E-07 | 8.2E-07 | 3.5E-07  | 1.0E-06 | 8.2E-07 | 8.2E-07 | 1.0E-06 | 1.0E-06 | 3.5E-07 | 2.4E-07  |
| 3.0               | 5.9E-07  | 5.6E-07 | 5.6E-07 | 5.6E-07 | 5.3E-07 | 5.3E-07 | 5.6E-07  | 5.7E-07 | 5.3E-07 | 5.3E-07 | 5.6E-07 | 5.6E-07 | 5.3E-07 | 5.1E-07  |
| 3.5               | 4.8E-07  | 4.8E-07 | 4.8E-07 | 4.8E-07 | 4.4E-07 | 4.4E-07 | 4.8E-07  | 4.7E-07 | 4.4E-07 | 4.4E-07 | 4.8E-07 | 4.8E-07 | 4.4E-07 | 4.0E-07  |
| 4.0               | 4.0E-07  | 4.0E-07 | 4.0E-07 | 4.0E-07 | 3.7E-07 | 3.7E-07 | 3.8E-07  | 3.9E-07 | 3.7E-07 | 3.7E-07 | 3.8E-07 | 3.8E-07 | 3.7E-07 | 3.4E-07  |
| 4.5               | 3.4E-07  | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07  | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.0E-07  |
| 5.0               | 2.9E-07  | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.8E-07 | 2.8E-07 | 2.8E-07  | 2.8E-07 | 2.8E-07 | 2.8E-07 | 2.8E-07 | 2.8E-07 | 2.8E-07 | 2.7E-07  |
| 6.0               | 2.2E-07  | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07  | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.0E-07  |
| 7.0               | 1.8E-07  | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07  | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.6E-07  |
| 8.0               | 1.4E-07  | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07  | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.3E-07  |
| 9.0               | 1.2E-07  | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07  | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.1E-07  |
| 10.0              | 1.0E-07  | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07  | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07  |
| 15.0              | 5.4E-08  | 5.4E-08 | 5.4E-08 | 5.4E-08 | 5.4E-08 | 5.4E-08 | 5.4E-08  | 5.4E-08 | 5.4E-08 | 5.4E-08 | 5.4E-08 | 5.4E-08 | 5.4E-08 | 5.4E-08  |
| 20.0              | 3.5E-08  | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08  | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08  |
| 30.0              | 1.8E-08  | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08  | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08  |
| 40.0              | 1.2E-08  | 1.2E-08 | 1.2E-08 | 1.2E-08 | 1.2E-08 | 1.2E-08 | 1.2E-08  | 1.2E-08 | 1.2E-08 | 1.2E-08 | 1.2E-08 | 1.2E-08 | 1.2E-08 | 1.2E-08  |
| 50.0              | 8.4E-09  | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09  | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09  |

MAX  
CONC 7.6E-07 7.7E-07 8.0E-07 8.2E-07 1.1E-06 1.1E-06 1.1E-06 1.1E-06 1.1E-06 1.1E-06 1.1E-06 1.1E-06 1.1E-06 1.1E-06 1.1E-06  
DIST(M) 2.5 2.0 2.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 09-10



PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
 STACK RELEASE NORMAL FLOW  
 STABILITY STABLE  
 SPEED 1. MPH

| 192- | 214- | 237- | 259- | 282- | 304- | 327- | 348- | 12- | 34- | 57- | 78- | 101- | 102- | 124- | 146- | 168- | 188- |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|------|------|
| 212  | 236  | 258  | 281  | 303  | 326  | 348  | 348  | 11  | 33  | 56  | 78  | 101  | 123  | 148  | 168  | 188  | 191  |

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |         |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4.0               | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     | *0.     |
| 4.5               | 3.8E-06 | 3.8E-14 | 1.7E-14 | 5.0E-18 | 5.5E-14 | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 5.0               | 7.4E-11 | 1.0E-11 | 1.2E-13 | 9.3E-13 | 1.4E-14 | 2.4E-14 | 2.0E-13 | 9.3E-13 | 1.9E-13 | 1.9E-10 | 1.7E-10 | 3.0E-11 | 4.0E-10 | 4.0E-10 | 3.0E-11 | 3.1E-12 | 3.9E-11 |
| 6.0               | 7.1E-09 | 3.8E-09 | 7.0E-11 | 9.8E-12 | 4.8E-11 | 6.5E-12 | 2.2E-11 | 1.8E-11 | 4.8E-11 | 6.7E-07 | 2.7E-08 | 1.0E-08 | 4.2E-08 | 1.3E-08 | 4.2E-08 | 2.4E-08 | 2.9E-08 |
| 7.0               | 3.5E-07 | 2.1E-08 | 1.2E-08 | 1.8E-10 | 1.9E-09 | 3.7E-10 | 3.4E-10 | 2.4E-10 | 6.3E-10 | 1.3E-08 | 1.6E-08 | 3.9E-08 | 1.5E-07 | 9.3E-08 | 4.2E-08 | 4.2E-08 | 3.2E-06 |
| 8.0               | 7.0E-07 | 1.1E-07 | 4.5E-08 | 2.2E-09 | 9.5E-09 | 2.2E-08 | 2.2E-08 | 1.7E-08 | 3.8E-08 | 2.0E-06 | 1.7E-07 | 2.3E-07 | 3.4E-07 | 1.9E-06 | 3.4E-06 | 4.8E-06 | 4.8E-06 |
| 9.0               | 7.5E-06 | 8.5E-07 | 1.1E-07 | 1.4E-08 | 3.0E-08 | 8.9E-08 | 8.9E-08 | 7.1E-08 | 1.4E-08 | 3.8E-06 | 6.5E-07 | 4.8E-07 | 6.2E-07 | 5.5E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 10.0              | 8.2E-06 | 1.3E-06 | 2.2E-07 | 3.6E-08 | 7.0E-08 | 2.5E-08 | 2.0E-08 | 3.6E-08 | 1.5E-06 | 1.5E-06 | 2.1E-06 | 3.8E-06 | 5.4E-06 | 3.8E-06 | 7.4E-06 | 1.0E-05 | 1.1E-05 |
| 15.0              | 8.8E-06 | 3.1E-06 | 1.1E-06 | 6.8E-07 | 6.1E-07 | 3.4E-07 | 3.0E-07 | 4.2E-07 | 8.8E-07 | 3.8E-06 | 3.8E-06 | 5.4E-06 | 8.8E-06 | 8.8E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 20.0              | 7.8E-06 | 4.4E-06 | 2.0E-06 | 2.0E-06 | 1.3E-06 | 8.8E-07 | 1.0E-06 | 1.3E-06 | 1.5E-06 | 8.7E-06 | 8.4E-06 | 8.2E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 |
| 25.0              | 6.6E-06 | 4.4E-06 | 2.4E-06 | 2.4E-06 | 1.8E-06 | 1.3E-06 | 1.3E-06 | 1.5E-06 | 1.5E-06 | 8.7E-06 | 8.7E-06 | 8.2E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 |
| 30.0              | 5.6E-06 | 4.1E-06 | 2.6E-06 | 2.6E-06 | 2.0E-06 | 1.5E-06 | 1.5E-06 | 1.6E-06 | 1.6E-06 | 4.7E-06 | 8.0E-06 | 6.6E-06 | 8.7E-06 | 8.7E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 |
| 40.0              | 4.9E-06 | 4.2E-06 | 2.8E-06 | 2.8E-06 | 2.1E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.6E-06 | 4.9E-06 | 4.6E-06 | 4.7E-06 | 4.0E-06 | 4.3E-06 | 4.3E-06 | 4.3E-06 |
| 50.0              | 3.6E-06 | 3.2E-06 | 2.2E-06 | 2.2E-06 | 1.9E-06 | 1.7E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.6E-06 | 3.6E-06 | 3.4E-06 | 3.7E-06 | 3.1E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 |

| MAX     | CONC    | DIST(M) |
|---------|---------|---------|
| 8.8E-06 | 4.4E-06 | 20.0    |
| 2.6E-06 | 2.6E-06 | 30.0    |
| 1.8E-06 | 1.8E-06 | 40.0    |
| 1.0E-05 | 1.0E-05 | 50.0    |
| 6.8E-06 | 6.8E-06 | 60.0    |
| 7.4E-06 | 7.4E-06 | 70.0    |
| 1.0E-05 | 1.0E-05 | 80.0    |
| 1.0E-05 | 1.0E-05 | 90.0    |
| 1.0E-05 | 1.0E-05 | 100.0   |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. DG-11

PEACH BOTTOM ATOMIC POWER PLANT  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
STACK RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 2. MPH

| DISTANCE<br>MILES | WIND DIRECTION RANGES |         |         |         |         |         |         |         |         |         | DOWN WIND SECTOR BEARING |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
|-------------------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                   | 213-214               | 214-215 | 215-216 | 216-217 | 217-218 | 218-219 | 219-220 | 220-221 | 221-222 | 222-223 | 223-224                  | 224-225 | 225-226 | 226-227 | 227-228 | 228-229 | 229-230 | 230-231 | 231-232 | 232-233 | 233-234 | 234-235 | 235-236 | 236-237 | 237-238 | 238-239 | 239-240 | 240-241 | 241-242 | 242-243 | 243-244 | 244-245 | 245-246 | 246-247 | 247-248 | 248-249 | 249-250 | 250-251 | 251-252 | 252-253 | 253-254 | 254-255 | 255-256 | 256-257 | 257-258 | 258-259 | 259-260 | 260-261 | 261-262 | 262-263 | 263-264 | 264-265 | 265-266 | 266-267 | 267-268 | 268-269 | 269-270 | 270-271 | 271-272 | 272-273 | 273-274 | 274-275 | 275-276 | 276-277 | 277-278 | 278-279 | 279-280 | 280-281 | 281-282 | 282-283 | 283-284 | 284-285 | 285-286 | 286-287 | 287-288 | 288-289 | 289-290 | 290-291 | 291-292 | 292-293 | 293-294 | 294-295 | 295-296 | 296-297 | 297-298 | 298-299 | 299-300 | 300-301 | 301-302 | 302-303 | 303-304 | 304-305 | 305-306 | 306-307 | 307-308 | 308-309 | 309-310 | 310-311 | 311-312 | 312-313 | 313-314 | 314-315 | 315-316 | 316-317 | 317-318 | 318-319 | 319-320 | 320-321 | 321-322 | 322-323 | 323-324 | 324-325 | 325-326 | 326-327 | 327-328 | 328-329 | 329-330 | 330-331 | 331-332 | 332-333 | 333-334 | 334-335 | 335-336 | 336-337 | 337-338 | 338-339 | 339-340 | 340-341 | 341-342 | 342-343 | 343-344 | 344-345 | 345-346 | 346-347 | 347-348 | 348-349 | 349-350 | 350-351 | 351-352 | 352-353 | 353-354 | 354-355 | 355-356 | 356-357 | 357-358 | 358-359 | 359-360 | 360-361 | 361-362 | 362-363 | 363-364 | 364-365 | 365-366 | 366-367 | 367-368 | 368-369 | 369-370 | 370-371 | 371-372 | 372-373 | 373-374 | 374-375 | 375-376 | 376-377 | 377-378 | 378-379 | 379-380 | 380-381 | 381-382 | 382-383 | 383-384 | 384-385 | 385-386 | 386-387 | 387-388 | 388-389 | 389-390 | 390-391 | 391-392 | 392-393 | 393-394 | 394-395 | 395-396 | 396-397 | 397-398 | 398-399 | 399-400 | 400-401 | 401-402 | 402-403 | 403-404 | 404-405 | 405-406 | 406-407 | 407-408 | 408-409 | 409-410 | 410-411 | 411-412 | 412-413 | 413-414 | 414-415 | 415-416 | 416-417 | 417-418 | 418-419 | 419-420 | 420-421 | 421-422 | 422-423 | 423-424 | 424-425 | 425-426 | 426-427 | 427-428 | 428-429 | 429-430 | 430-431 | 431-432 | 432-433 | 433-434 | 434-435 | 435-436 | 436-437 | 437-438 | 438-439 | 439-440 | 440-441 | 441-442 | 442-443 | 443-444 | 444-445 | 445-446 | 446-447 | 447-448 | 448-449 | 449-450 | 450-451 | 451-452 | 452-453 | 453-454 | 454-455 | 455-456 | 456-457 | 457-458 | 458-459 | 459-460 | 460-461 | 461-462 | 462-463 | 463-464 | 464-465 | 465-466 | 466-467 | 467-468 | 468-469 | 469-470 | 470-471 | 471-472 | 472-473 | 473-474 | 474-475 | 475-476 | 476-477 | 477-478 | 478-479 | 479-480 | 480-481 | 481-482 | 482-483 | 483-484 | 484-485 | 485-486 | 486-487 | 487-488 | 488-489 | 489-490 | 490-491 | 491-492 | 492-493 | 493-494 | 494-495 | 495-496 | 496-497 | 497-498 | 498-499 | 499-500 | 500-501 | 501-502 | 502-503 | 503-504 | 504-505 | 505-506 | 506-507 | 507-508 | 508-509 | 509-510 | 510-511 | 511-512 | 512-513 | 513-514 | 514-515 | 515-516 | 516-517 | 517-518 | 518-519 | 519-520 | 520-521 | 521-522 | 522-523 | 523-524 | 524-525 | 525-526 | 526-527 | 527-528 | 528-529 | 529-530 | 530-531 | 531-532 | 532-533 | 533-534 | 534-535 | 535-536 | 536-537 | 537-538 | 538-539 | 539-540 | 540-541 | 541-542 | 542-543 | 543-544 | 544-545 | 545-546 | 546-547 | 547-548 | 548-549 | 549-550 | 550-551 | 551-552 | 552-553 | 553-554 | 554-555 | 555-556 | 556-557 | 557-558 | 558-559 | 559-560 | 560-561 | 561-562 | 562-563 | 563-564 | 564-565 | 565-566 | 566-567 | 567-568 | 568-569 | 569-570 | 570-571 | 571-572 | 572-573 | 573-574 | 574-575 | 575-576 | 576-577 | 577-578 | 578-579 | 579-580 | 580-581 | 581-582 | 582-583 | 583-584 | 584-585 | 585-586 | 586-587 | 587-588 | 588-589 | 589-590 | 590-591 | 591-592 | 592-593 | 593-594 | 594-595 | 595-596 | 596-597 | 597-598 | 598-599 | 599-600 | 600-601 | 601-602 | 602-603 | 603-604 | 604-605 | 605-606 | 606-607 | 607-608 | 608-609 | 609-610 | 610-611 | 611-612 | 612-613 | 613-614 | 614-615 | 615-616 | 616-617 | 617-618 | 618-619 | 619-620 | 620-621 | 621-622 | 622-623 | 623-624 | 624-625 | 625-626 | 626-627 | 627-628 | 628-629 | 629-630 | 630-631 | 631-632 | 632-633 | 633-634 | 634-635 | 635-636 | 636-637 | 637-638 | 638-639 | 639-640 | 640-641 | 641-642 | 642-643 | 643-644 | 644-645 | 645-646 | 646-647 | 647-648 | 648-649 | 649-650 | 650-651 | 651-652 | 652-653 | 653-654 | 654-655 | 655-656 | 656-657 | 657-658 | 658-659 | 659-660 | 660-661 | 661-662 | 662-663 | 663-664 | 664-665 | 665-666 | 666-667 | 667-668 | 668-669 | 669-670 | 670-671 | 671-672 | 672-673 | 673-674 | 674-675 | 675-676 | 676-677 | 677-678 | 678-679 | 679-680 | 680-681 | 681-682 | 682-683 | 683-684 | 684-685 | 685-686 | 686-687 | 687-688 | 688-689 | 689-690 | 690-691 | 691-692 | 692-693 | 693-694 | 694-695 | 695-696 | 696-697 | 697-698 | 698-699 | 699-700 | 700-701 | 701-702 | 702-703 | 703-704 | 704-705 | 705-706 | 706-707 | 707-708 | 708-709 | 709-710 | 710-711 | 711-712 | 712-713 | 713-714 | 714-715 | 715-716 | 716-717 | 717-718 | 718-719 | 719-720 | 720-721 | 721-722 | 722-723 | 723-724 | 724-725 | 725-726 | 726-727 | 727-728 | 728-729 | 729-730 | 730-731 | 731-732 | 732-733 | 733-734 | 734-735 | 735-736 | 736-737 | 737-738 | 738-739 | 739-740 | 740-741 | 741-742 | 742-743 | 743-744 | 744-745 | 745-746 | 746-747 | 747-748 | 748-749 | 749-750 | 750-751 | 751-752 | 752-753 | 753-754 | 754-755 | 755-756 | 756-757 | 757-758 | 758-759 | 759-760 | 760-761 | 761-762 | 762-763 | 763-764 | 764-765 | 765-766 | 766-767 | 767-768 | 768-769 | 769-770 | 770-771 | 771-772 | 772-773 | 773-774 | 774-775 | 775-776 | 776-777 | 777-778 | 778-779 | 779-780 | 780-781 | 781-782 | 782-783 | 783-784 | 784-785 | 785-786 | 786-787 | 787-788 | 788-789 | 789-790 | 790-791 | 791-792 | 792-793 | 793-794 | 794-795 | 795-796 | 796-797 | 797-798 | 798-799 | 799-800 | 800-801 | 801-802 | 802-803 | 803-804 | 804-805 | 805-806 | 806-807 | 807-808 | 808-809 | 809-810 | 810-811 | 811-812 | 812-813 | 813-814 | 814-815 | 815-816 | 816-817 | 817-818 | 818-819 | 819-820 | 820-821 | 821-822 | 822-823 | 823-824 | 824-825 | 825-826 | 826-827 | 827-828 | 828-829 | 829-830 | 830-831 | 831-832 | 832-833 | 833-834 | 834-835 | 835-836 | 836-837 | 837-838 | 838-839 | 839-840 | 840-841 | 841-842 | 842-843 | 843-844 | 844-845 | 845-846 | 846-847 | 847-848 | 848-849 | 849-850 | 850-851 | 851-852 | 852-853 | 853-854 | 854-855 | 855-856 | 856-857 | 857-858 | 858-859 | 859-860 | 860-861 | 861-862 | 862-863 | 863-864 | 864-865 | 865-866 | 866-867 | 867-868 | 868-869 | 869-870 | 870-871 | 871-872 | 872-873 | 873-874 | 874-875 | 875-876 | 876-877 | 877-878 | 878-879 | 879-880 | 880-881 | 881-882 | 882-883 | 883-884 | 884-885 | 885-886 | 886-887 | 887-888 | 888-889 | 889-890 | 890-891 | 891-892 | 892-893 | 893-894 | 894-895 | 895-896 | 896-897 | 897-898 | 898-899 | 899-900 | 900-901 | 901-902 | 902-903 | 903-904 | 904-905 | 905-906 | 906-907 | 907-908 | 908-909 | 909-910 | 910-911 | 911-912 | 912-913 | 913-914 | 914-915 | 915-916 | 916-917 | 917-918 | 918-919 | 919-920 | 920-921 | 921-922 | 922-923 | 923-924 | 924-925 | 925-926 | 926-927 | 927-928 | 928-929 | 929-930 | 930-931 | 931-932 | 932-933 | 933-934 | 934-935 | 935-936 | 936-937 | 937-938 | 938-939 | 939-940 | 940-941 | 941-942 | 942-943 | 943-944 | 944-945 | 945-946 | 946-947 | 947-948 | 948-949 | 949-950 | 950-951 | 951-952 | 952-953 | 953-954 | 954-955 | 955-956 | 956-957 | 957-958 | 958-959 | 959-960 | 960-961 | 961-962 | 962-963 | 963-964 | 964-965 | 965-966 | 966-967 | 967-968 | 968-969 | 969-970 | 970-971 | 971-972 | 972-973 | 973-974 | 974-975 | 975-976 | 976-977 | 977-978 | 978-979 | 979-980 | 980-981 | 981-982 | 982-983 | 983-984 | 984-985 | 985-986 | 986-987 | 987-988 | 988-989 | 989-990 | 990-991 | 991-992 | 992-993 | 993-994 | 994-995 | 995-996 | 996-997 | 997-998 | 998-999 | 999-1000 | 1000-1001 | 1001-1002 | 1002-1003 | 1003-1004 | 1004-1005 | 1005-1006 | 1006-1007 | 1007-1008 | 1008-1009 | 1009-1010 | 1010-1011 | 1011-1012 | 1012-1013 | 1013-1014 | 1014-1015 | 1015-1016 | 1016-1017 | 1017-1018 | 1018-1019 | 1019-1020 | 1020-1021 | 1021-1022 | 1022-1023 | 1023-1024 | 1024-1025 | 1025-1026 | 1026-1027 | 1027-1028 | 1028-1029 | 1029-1030 | 1030-1031 | 1031-1032 | 1032-1033 | 1033-1034 | 1034-1035 | 1035-1036 | 1036-1037 | 1037-1038 | 1038-1039 | 1039-1040 | 1040-1041 | 1041-1042 | 1042-1043 | 1043-1044 | 1044-1045 | 1045-1046 | 1046-1047 | 1047-1048 | 1048-1049 | 1049-1050 | 1050-1051 | 1051-1052 | 1052-1053 | 1053-1054 | 1054-1055 | 1055-1056 | 1056-1057 | 1057-1058 | 1058-1059 | 1059-1060 | 1060-1061 | 1061-1062 | 1062-1063 | 1063-1064 | 1064-1065 | 1065-1066 | 1066-1067 | 1067-1068 | 1068-1069 | 1069-1070 | 1070-1071 | 1071-1072 | 1072-1073 | 1073-1074 | 1074-1075 | 1075-1076 | 1076-1077 | 1077-1078 | 1078-1079 | 1079-1080 | 1080-1081 | 1081-1082 | 1082-1083 | 1083-1084 | 1084-1085 | 1085-1086 | 1086-1087 | 1087-1088 | 1088-1089 | 1089-1090 | 1090-1091 | 1091-1092 | 1092-1093 | 1093-1094 | 1094-1095 | 1095-1096 | 1096-1097 | 1097-1098 | 1098-1099 | 1099-1100 | 1100-1101 | 1101-1102 | 1102-1103 | 1103-1104 | 1104-1105 | 1105-1106 | 1106-1107 | 1107-1108 | 1108-1109 | 1109-1110 | 1110-1111 | 1111-1112 | 1112-1113 | 1113-1114 | 1114-1115 | 1115-1116 | 1116-1117 | 1117-1118 | 1118-1119 | 1119-1120 | 1120-1121 | 1121-1122 | 1122-1123 | 1123-1124 | 1124-1125 | 1125-1126 | 1126-1127 | 1127-1128 | 1128-1129 | 1129-1130 | 1130-1131 | 1131-1132 | 1132-1133 | 1133-1134 | 1134-1135 | 1135-1136 | 1136-1137 | 1137-1138 | 1138-1139 | 1139-1140 | 1140-1141 | 1141-1142 | 1142-1143 | 1143-1144 | 1144-1145 | 1145-1146 | 1146-1147 | 1147-1148 | 1148-1149 | 1149-1150 | 1150-1151 | 1151-1152 | 1152-1153 | 1153-1154 | 1154-1155 | 1155-1156 | 1156-1157 | 1157-1158 | 1158-1159 | 1159-1160 | 1160-1161 | 1161-1162 | 1162-1163 | 1163-1164 | 1164-1165 | 1165-1166 | 1166-1167 | 1167-1168 | 1168-1169 | 1169-1170 | 1170-1171 | 1171-1172 | 1172-1173 | 1173-1174 | 1174-1175 | 1175-1176 | 1176-1177 | 1177-1178 | 1178-1179 | 1179-1180 | 1180-1181 | 1181-1182 | 1182-1183 | 1183-1184 | 1184-1185 | 1185-1186 | 1186-1187 |



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
STACK RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 5. MPH

192- 214- 237- 259- 282- 304- 327- 349- 12- 34- 56 78 101 123 146 168 191  
213 236 261 303 326 348 11 33

| DISTANCE<br>MILES | NNE | NE  | ENE | E   | ESE | SE  | SSW | SW  | WSW | M   | MNW | NW  | NNW | N   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0.4               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

MAX

CONC 1.1E-05 7.3E-06 4.4E-06 2.6E-06 1.8E-06 1.7E-06 2.0E-06 1.9E-06 7.3E-06 7.2E-06 1.0E-05 9.7E-06 1.2E-05 1.2E-05  
DIST(MI) 7.0 9.0 8.0 15.0 10.0 10.0 15.0 10.0 8.0 9.0 8.0 6.0 8.0 7.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-13

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES, FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
STACK RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 7. MPH

| WIND DIRECTION RANGES | 70-79 | 80-89 | 90-99 | 100-109 | 110-119 | 120-129 | 130-139 | 140-149 | 150-159 | 160-169 | 170-179 |
|-----------------------|-------|-------|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 192-213               | 34    | 35    | 36    | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44      |
| 214-236               | 56    | 57    | 58    | 59      | 60      | 61      | 62      | 63      | 64      | 65      | 66      |
| 237-258               | 34    | 35    | 36    | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44      |
| 259-281               | 56    | 57    | 58    | 59      | 60      | 61      | 62      | 63      | 64      | 65      | 66      |
| 282-303               | 34    | 35    | 36    | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44      |
| 304-326               | 56    | 57    | 58    | 59      | 60      | 61      | 62      | 63      | 64      | 65      | 66      |
| 327-348               | 34    | 35    | 36    | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44      |
| 349-371               | 56    | 57    | 58    | 59      | 60      | 61      | 62      | 63      | 64      | 65      | 66      |
| 372-394               | 34    | 35    | 36    | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44      |
| 395-417               | 56    | 57    | 58    | 59      | 60      | 61      | 62      | 63      | 64      | 65      | 66      |
| 418-440               | 34    | 35    | 36    | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44      |
| 441-463               | 56    | 57    | 58    | 59      | 60      | 61      | 62      | 63      | 64      | 65      | 66      |
| 464-486               | 34    | 35    | 36    | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44      |
| 487-509               | 56    | 57    | 58    | 59      | 60      | 61      | 62      | 63      | 64      | 65      | 66      |

| DISTANCE<br>MILES | DOWN WIND SECTOR BEARING |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------------|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                   | NNE                      | NE  | ENE | E   | ESE | SE  | SSE | S   | SSW | SW  | WSW | W   | WNW | NW  | NNW | N   |
| 1.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| MAX | CONC | DIST(MI) | 7.0 | 8.0 | 15.0 | 30.0 | 60.0 | 120.0 | 180.0 | 360.0 | 720.0 | 1440.0 | 2880.0 | 5760.0 | 11520.0 | 23040.0 | 46080.0 |
|-----|------|----------|-----|-----|------|------|------|-------|-------|-------|-------|--------|--------|--------|---------|---------|---------|
| 0.0 | 0.0  | 0.0      | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     |

TABLE NO. 00-14

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
STACK RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 10. MPH

|      |      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192- | 214- | 237- | 259- | 282- | 304- | 327- | 349- | 12- | 34- | 87- | 78- | 102- | 124- | 147- | 169- |
| 213  | 236  | 288  | 281  | 303  | 328  | 348  | 11   | 33  | 86  | 78  | 101 | 123  | 146  | 168  | 191  |

DOWN WIND SECTOR BEARING

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 4.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 4.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 5.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 5.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 6.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 6.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 7.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.5               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.0               | 4.3E-18 | 9.3E-14 | 6.4E-13 | 6.4E-13 | 0.0 | 1.6E-12 | 1.6E-12 | 2.6E-14 | 3.1E-12 | 2.6E-14 | 1.9E-18 | 9.1E-14 | 3.0E-13 | 3.6E-14 | 0.0     | 0.0     |
| 2.5               | 3.7E-08 | 4.2E-10 | 4.2E-10 | 8.9E-11 | 0.0 | 1.2E-10 | 1.2E-10 | 2.3E-11 | 8.4E-10 | 1.6E-08 | 2.3E-11 | 2.9E-10 | 8.4E-10 | 2.9E-10 | 6.4E-13 | 0.0     |
| 3.0               | 1.3E-07 | 1.6E-08 | 8.8E-10 | 8.8E-10 | 0.0 | 1.6E-09 | 2.5E-09 | 1.6E-08 | 3.9E-08 | 2.3E-07 | 6.0E-08 | 4.6E-09 | 8.0E-08 | 6.0E-08 | 5.9E-11 | 6.9E-12 |
| 3.5               | 3.7E-07 | 3.7E-07 | 5.3E-08 | 5.1E-08 | 0.0 | 7.7E-08 | 1.2E-08 | 8.3E-08 | 1.2E-07 | 4.1E-06 | 1.2E-06 | 7.8E-08 | 1.1E-07 | 3.7E-07 | 3.7E-07 | 1.8E-06 |
| 4.0               | 5.8E-07 | 9.3E-07 | 1.2E-07 | 3.3E-08 | 0.0 | 2.4E-08 | 3.3E-08 | 1.2E-07 | 1.1E-07 | 7.1E-06 | 3.2E-06 | 2.6E-07 | 8.3E-07 | 9.3E-07 | 5.8E-07 | 1.8E-06 |
| 4.5               | 1.8E-06 | 1.4E-06 | 8.8E-07 | 1.5E-07 | 0.0 | 5.3E-08 | 7.1E-08 | 2.1E-07 | 3.3E-07 | 7.8E-06 | 3.3E-06 | 8.0E-07 | 3.3E-06 | 4.3E-06 | 1.8E-06 | 3.8E-06 |
| 5.0               | 2.6E-06 | 1.4E-06 | 8.8E-07 | 2.5E-07 | 0.0 | 9.6E-08 | 1.2E-07 | 3.1E-07 | 8.7E-07 | 9.3E-06 | 3.4E-06 | 2.0E-06 | 4.3E-06 | 4.3E-06 | 2.0E-06 | 6.6E-06 |
| 6.0               | 4.3E-06 | 3.6E-06 | 9.7E-07 | 4.4E-07 | 0.0 | 1.6E-07 | 3.7E-07 | 6.1E-07 | 8.4E-07 | 7.2E-06 | 3.3E-06 | 2.5E-06 | 6.1E-06 | 4.9E-06 | 5.1E-06 | 8.6E-06 |
| 7.0               | 5.7E-06 | 3.4E-06 | 1.3E-06 | 6.2E-07 | 0.0 | 1.6E-06 | 8.1E-07 | 7.1E-07 | 1.0E-06 | 8.8E-06 | 3.1E-06 | 3.8E-06 | 5.1E-06 | 4.7E-06 | 5.8E-06 | 5.8E-06 |
| 8.0               | 4.8E-06 | 3.4E-06 | 2.7E-06 | 9.4E-07 | 0.0 | 9.4E-07 | 9.4E-07 | 1.2E-06 | 1.2E-06 | 4.9E-06 | 3.8E-06 | 4.1E-06 | 4.4E-06 | 4.9E-06 | 4.9E-06 | 4.9E-06 |
| 9.0               | 4.1E-06 | 3.9E-06 | 2.5E-06 | 1.2E-06 | 0.0 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 3.6E-06 | 3.5E-06 | 3.6E-06 | 3.6E-06 | 3.6E-06 | 3.6E-06 | 3.6E-06 |
| 10.0              | 3.6E-06 | 3.4E-06 | 2.3E-06 | 1.3E-06 | 0.0 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 3.6E-06 | 3.5E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 |
| 15.0              | 2.0E-06 | 2.0E-06 | 1.6E-06 | 1.4E-06 | 0.0 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 |
| 20.0              | 1.3E-06 | 1.3E-06 | 1.1E-06 | 1.1E-06 | 0.0 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 |
| 25.0              | 9.8E-07 | 9.8E-07 | 8.7E-07 | 8.7E-07 | 0.0 | 8.6E-07 | 8.6E-07 | 8.6E-07 | 8.6E-07 | 9.8E-07 | 9.8E-07 | 9.8E-07 | 9.8E-07 | 9.8E-07 | 9.8E-07 | 9.8E-07 |
| 30.0              | 7.6E-07 | 7.6E-07 | 6.9E-07 | 6.9E-07 | 0.0 | 6.9E-07 | 6.9E-07 | 6.9E-07 | 6.9E-07 | 7.6E-07 | 7.6E-07 | 7.6E-07 | 7.6E-07 | 7.6E-07 | 7.6E-07 | 7.6E-07 |
| 40.0              | 5.0E-07 | 5.0E-07 | 4.8E-07 | 4.8E-07 | 0.0 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 |
| 50.0              | 3.7E-07 | 3.7E-07 | 3.5E-07 | 3.5E-07 | 0.0 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 |

MAX

|          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| CONC     | 5.7E-06 | 3.9E-06 | 2.7E-06 | 1.4E-06 | 1.6E-06 | 1.1E-06 | 1.1E-06 | 9.9E-07 | 1.3E-06 | 9.3E-06 | 3.9E-06 | 4.1E-06 | 6.1E-06 | 4.9E-06 | 6.1E-06 | 6.6E-06 |
| DIST(MI) | 7.0     | 8.0     | 8.0     | 18.0    | 9.0     | 10.0    | 10.0    | 10.0    | 10.0    | 10.0    | 8.0     | 8.0     | 8.0     | 6.0     | 6.0     | 5.0     |

TABLE NO. 00-18

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR



PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHE/Q  
 STACK RELEASE NORMAL FLOW  
 STABILITY STABLE  
 SPEED 13. MPH

| DISTANCE<br>MILES | WIND DIRECTION RANGES |         |         |         |         |         |         |        |       |       | DOWN WIND SECTOR BEARING |        |         |         |         |         |  |  |  |  |
|-------------------|-----------------------|---------|---------|---------|---------|---------|---------|--------|-------|-------|--------------------------|--------|---------|---------|---------|---------|--|--|--|--|
|                   | 182-213               | 214-236 | 237-288 | 289-281 | 282-303 | 304-328 | 327-348 | 349-11 | 12-33 | 34-56 | 57-78                    | 79-101 | 102-123 | 124-146 | 147-168 | 169-191 |  |  |  |  |
| 0.4               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 0.4               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 0.5               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 0.5               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 0.6               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 0.6               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 0.7               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 1.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 1.5               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 2.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 2.5               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 3.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 3.5               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 4.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 4.5               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 5.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 6.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 7.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 7.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 8.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 8.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 9.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 10.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 15.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 20.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 25.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 30.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 40.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |
| 50.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0   | 0.0   | 0.0                      | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |  |  |  |  |

| MAX CONC | 4.5E-06 | 3.1E-06 | 2.2E-06 | 1.1E-06 | 1.3E-06 | 8.7E-07 | 8.0E-07 | 1.0E-06 | 7.1E-06 | 3.1E-06 | 4.8E-06 | 3.9E-06 | 4.8E-06 | 5.3E-06 | 5.0 |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----|
| DIST(MI) | 7.0     | 9.0     | 8.0     | 15.0    | 8.0     | 10.0    | 10.0    | 10.0    | 10.0    | 8.0     | 8.0     | 6.0     | 6.0     | 8.0     | 8.0 |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-16

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
STACK RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 16. MPH

| DISTANCE<br>MILES | WIND DIRECTION RANGES |             |             |             |             |             |             |            |            |            |           |           |            |            |             |             | DOWN WIND SECTOR BEARINGS |             |       |  |
|-------------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|-----------|-----------|------------|------------|-------------|-------------|---------------------------|-------------|-------|--|
|                   | 192-<br>213           | 214-<br>238 | 237-<br>258 | 289-<br>281 | 282-<br>303 | 304-<br>328 | 327-<br>348 | 348-<br>11 | 349-<br>33 | 349-<br>33 | 34-<br>86 | 87-<br>78 | 97-<br>101 | 79-<br>102 | 102-<br>123 | 124-<br>146 | 147-<br>168               | 169-<br>181 | CHI/Q |  |
| .4 0.             | *0.                   | 0.          | 0.          | 0.          | 0.          | 0.          | 0.          | 0.         | 0.         | 0.         | 0.        | 0.        | 0.         | 0.         | 0.          | 0.          | 0.                        | 0.          | 0.    |  |
| .4 0.             | 0.                    | 0.          | 0.          | 0.          | 0.          | 0.          | 0.          | 0.         | 0.         | 0.         | 0.        | 0.        | 0.         | 0.         | 0.          | 0.          | 0.                        | 0.          | 0.    |  |
| .4 0.             | 0.                    | 0.          | 0.          | 0.          | 0.          | 0.          | 0.          | 0.         | 0.         | 0.         | 0.        | 0.        | 0.         | 0.         | 0.          | 0.          | 0.                        | 0.          | 0.    |  |
| .8 0.             | 0.                    | 0.          | 0.          | 0.          | 0.          | 0.          | 0.          | 0.         | 0.         | 0.         | 0.        | 0.        | 0.         | 0.         | 0.          | 0.          | 0.                        | 0.          | 0.    |  |
| .8 0.             | 0.                    | 0.          | 0.          | 0.          | 0.          | 0.          | 0.          | 0.         | 0.         | 0.         | 0.        | 0.        | 0.         | 0.         | 0.          | 0.          | 0.                        | 0.          | 0.    |  |
| .6 0.             | 0.                    | 0.          | 0.          | 0.          | 0.          | 0.          | 0.          | 0.         | 0.         | 0.         | 0.        | 0.        | 0.         | 0.         | 0.          | 0.          | 0.                        | 0.          | 0.    |  |
| .6 0.             | 0.                    | 0.          | 0.          | 0.          | 0.          | 0.          | 0.          | 0.         | 0.         | 0.         | 0.        | 0.        | 0.         | 0.         | 0.          | 0.          | 0.                        | 0.          | 0.    |  |
| .7 0.             | 0.                    | 0.          | 0.          | 0.          | 0.          | 0.          | 0.          | 0.         | 0.         | 0.         | 0.        | 0.        | 0.         | 0.         | 0.          | 0.          | 0.                        | 0.          | 0.    |  |
| 1.0 0.            | 0.                    | 0.          | 0.          | 0.          | 0.          | 0.          | 0.          | 0.         | 0.         | 0.         | 0.        | 0.        | 0.         | 0.         | 0.          | 0.          | 0.                        | 0.          | 0.    |  |
| 1.8 0.            | 0.                    | 0.          | 0.          | 0.          | 0.          | 0.          | 0.          | 0.         | 0.         | 0.         | 0.        | 0.        | 0.         | 0.         | 0.          | 0.          | 0.                        | 0.          | 0.    |  |
| 2.0 6.9E-15       | 1.4E-13               | 4.3E-13     | 9.3E-13     | 9.3E-13     | 0.          | 1.0E-15     | 8.0E-14     | 8.1E-12    | 8.0E-14    | 8.0E-14    | 3.6E-18   | 1.7E-13   | 8.5E-13    | 8.5E-13    | 8.0E-14     | 0.          | 0.                        | 0.          | 0.    |  |
| 2.5 3.6E-08       | 4.6E-10               | 4.6E-10     | 6.9E-11     | 0.          | 2.3E-12     | 2.3E-12     | 3.0E-11     | 6.9E-10    | 1.8E-08    | 1.8E-08    | 3.0E-11   | 3.1E-10   | 6.5E-10    | 3.1E-10    | 9.3E-13     | 0.          | 0.                        | 0.          | 0.    |  |
| 3.0 1.1E-07       | 1.5E-08               | 1.5E-08     | 8.9E-10     | 5.2E-10     | 1.5E-08     | 2.4E-09     | 1.5E-08     | 3.9E-08    | 2.0E-07    | 2.0E-07    | 8.7E-08   | 4.7E-09   | 8.0E-08    | 8.7E-08    | 6.8E-11     | 8.3E-12     | 0.                        | 0.          | 0.    |  |
| 3.8 3.0E-07       | 3.0E-07               | 4.6E-08     | 4.6E-09     | 1.0E-08     | 6.9E-08     | 1.0E-08     | 4.6E-08     | 8.9E-08    | 3.0E-06    | 3.0E-06    | 8.1E-07   | 5.4E-08   | 3.5E-08    | 1.6E-07    | 6.2E-08     | 2.2E-07     | 0.                        | 0.          | 0.    |  |
| 4.0 4.5E-07       | 7.1E-07               | 9.5E-08     | 2.8E-08     | 1.7E-07     | 2.0E-08     | 2.8E-08     | 9.5E-08     | 1.7E-07    | 4.8E-06    | 4.8E-06    | 2.3E-06   | 2.8E-07   | 7.1E-07    | 7.1E-07    | 4.5E-07     | 1.4E-06     | 0.                        | 0.          | 0.    |  |
| 4.5 1.3E-06       | 8.8E-07               | 2.0E-07     | 1.3E-07     | 3.2E-07     | 4.3E-08     | 5.7E-08     | 1.6E-07     | 5.7E-07    | 5.2E-06    | 5.2E-06    | 2.4E-06   | 5.0E-07   | 2.4E-06    | 3.0E-06    | 1.3E-06     | 2.7E-06     | 0.                        | 0.          | 0.    |  |
| 5.0 1.9E-06       | 1.0E-06               | 5.1E-07     | 1.9E-07     | 4.2E-07     | 7.9E-08     | 9.5E-08     | 2.3E-07     | 4.2E-07    | 9.8E-06    | 9.8E-06    | 2.4E-06   | 1.4E-06   | 2.9E-06    | 2.9E-06    | 1.4E-06     | 4.4E-06     | 0.                        | 0.          | 0.    |  |
| 6.0 2.9E-06       | 2.2E-06               | 6.8E-07     | 2.2E-07     | 6.0E-07     | 2.7E-07     | 4.4E-07     | 3.8E-07     | 6.0E-07    | 4.5E-06    | 4.5E-06    | 2.3E-06   | 3.5E-06   | 4.0E-06    | 3.3E-06    | 4.0E-06     | 3.6E-06     | 0.                        | 0.          | 0.    |  |
| 7.0 3.6E-06       | 2.2E-06               | 9.0E-07     | 4.4E-07     | 1.1E-06     | 5.7E-07     | 5.7E-07     | 8.0E-07     | 7.2E-07    | 3.7E-06    | 3.7E-06    | 2.1E-06   | 2.8E-06   | 3.3E-06    | 3.7E-06    | 3.7E-06     | 3.7E-06     | 0.                        | 0.          | 0.    |  |
| 8.0 3.0E-06       | 2.2E-06               | 1.8E-06     | 6.5E-07     | 1.1E-06     | 6.5E-07     | 6.5E-07     | 8.8E-07     | 7.9E-07    | 3.0E-06    | 3.0E-06    | 2.5E-06   | 2.6E-06   | 2.8E-06    | 3.0E-06    | 3.0E-06     | 3.0E-06     | 0.                        | 0.          | 0.    |  |
| 9.0 2.6E-06       | 2.8E-06               | 1.7E-06     | 8.3E-07     | 1.1E-06     | 7.0E-07     | 7.0E-07     | 6.4E-07     | 8.2E-07    | 2.6E-06    | 2.6E-06    | 2.5E-06   | 2.3E-06   | 2.4E-06    | 2.5E-06    | 2.6E-06     | 2.6E-06     | 0.                        | 0.          | 0.    |  |
| 10.0 2.2E-06      | 2.2E-06               | 1.5E-06     | 8.4E-07     | 1.1E-06     | 7.2E-07     | 7.2E-07     | 6.7E-07     | 8.4E-07    | 2.2E-06    | 2.2E-06    | 2.2E-06   | 2.2E-06   | 2.2E-06    | 2.2E-06    | 2.2E-06     | 2.2E-06     | 0.                        | 0.          | 0.    |  |
| 15.0 1.3E-06      | 1.2E-06               | 1.0E-06     | 8.7E-07     | 8.3E-07     | 6.7E-07     | 6.4E-07     | 7.3E-07     | 1.3E-06    | 1.3E-06    | 1.3E-06    | 1.3E-06   | 1.3E-06   | 1.3E-06    | 1.3E-06    | 1.3E-06     | 1.3E-06     | 0.                        | 0.          | 0.    |  |
| 20.0 8.4E-07      | 8.4E-07               | 7.3E-07     | 7.3E-07     | 6.4E-07     | 5.5E-07     | 5.5E-07     | 5.3E-07     | 5.8E-07    | 8.4E-07    | 8.4E-07    | 8.4E-07   | 8.4E-07   | 8.4E-07    | 8.4E-07    | 8.4E-07     | 8.4E-07     | 0.                        | 0.          | 0.    |  |
| 25.0 6.1E-07      | 6.1E-07               | 5.5E-07     | 5.5E-07     | 4.5E-07     | 4.5E-07     | 4.5E-07     | 4.4E-07     | 4.7E-07    | 6.1E-07    | 6.1E-07    | 6.1E-07   | 6.1E-07   | 6.1E-07    | 6.1E-07    | 6.1E-07     | 6.1E-07     | 0.                        | 0.          | 0.    |  |
| 30.0 4.7E-07      | 4.7E-07               | 4.4E-07     | 4.4E-07     | 3.7E-07     | 3.7E-07     | 3.7E-07     | 3.9E-07     | 4.7E-07    | 4.7E-07    | 4.7E-07    | 4.7E-07   | 4.7E-07   | 4.7E-07    | 4.7E-07    | 4.7E-07     | 4.7E-07     | 0.                        | 0.          | 0.    |  |
| 40.0 3.1E-07      | 3.1E-07               | 3.0E-07     | 3.0E-07     | 2.7E-07     | 2.7E-07     | 2.7E-07     | 2.7E-07     | 2.7E-07    | 3.1E-07    | 3.1E-07    | 3.1E-07   | 3.1E-07   | 3.1E-07    | 3.1E-07    | 3.1E-07     | 3.1E-07     | 0.                        | 0.          | 0.    |  |
| 50.0 2.3E-07      | 2.3E-07               | 2.2E-07     | 2.2E-07     | 2.0E-07     | 2.0E-07     | 2.0E-07     | 2.0E-07     | 2.0E-07    | 2.3E-07    | 2.3E-07    | 2.3E-07   | 2.3E-07   | 2.3E-07    | 2.3E-07    | 2.3E-07     | 2.3E-07     | 0.                        | 0.          | 0.    |  |

MAX  
CONC 3.6E-06 2.5E-06 1.8E-06 8.7E-07 1.1E-06 7.2E-07 7.2E-07 6.7E-07 8.4E-07 5.8E-06 2.5E-06 2.6E-06 4.0E-06 3.2E-06 4.0E-06 4.0E-06 4.4E-06  
DIST(MI) 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0

TABLE NO. 00-17

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CMI/Q  
STACK RELEASE STABILITY UNSTABLE  
LOW FLOW  
SPEED 1. MPH  
134- 147- 168-  
102- 123 146 168 181

| WIND DIRECTION | RANGES | SSW  | SW   | MSW  | W    | MNW | NW  | MNW | M   |
|----------------|--------|------|------|------|------|-----|-----|-----|-----|
| 192-           | 214-   | 237- | 282- | 304- | 348- | 348 | 348 | 348 | 348 |
| 213            | 236    | 288  | 303  | 326  | 348  | 348 | 348 | 348 | 348 |

| DISTANCE MILES | NNE      | NE       | ENE      | E        | ESE      | SE       | SSE      | S        | SSW      | SW       | MSW      | W        | MNW      | NW       | MNW      | M        |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 4              | 4.2E-07  | 3.8E-07  | 3.5E-07  | 3.2E-07  | 3.0E-07  | 2.8E-07  | 2.6E-07  | 2.4E-07  | 2.2E-07  | 2.0E-07  | 1.8E-07  | 1.6E-07  | 1.4E-07  | 1.2E-07  | 1.0E-07  | 8.8E-08  |
| 6              | 6.2E-07  | 5.7E-07  | 5.3E-07  | 4.9E-07  | 4.6E-07  | 4.3E-07  | 4.0E-07  | 3.7E-07  | 3.4E-07  | 3.1E-07  | 2.8E-07  | 2.5E-07  | 2.2E-07  | 1.9E-07  | 1.6E-07  | 1.4E-07  |
| 8              | 8.2E-07  | 7.7E-07  | 7.3E-07  | 6.9E-07  | 6.6E-07  | 6.3E-07  | 6.0E-07  | 5.7E-07  | 5.4E-07  | 5.1E-07  | 4.8E-07  | 4.5E-07  | 4.2E-07  | 3.9E-07  | 3.6E-07  | 3.3E-07  |
| 10             | 1.0E-06  | 9.5E-07  | 9.1E-07  | 8.7E-07  | 8.4E-07  | 8.1E-07  | 7.8E-07  | 7.5E-07  | 7.2E-07  | 6.9E-07  | 6.6E-07  | 6.3E-07  | 6.0E-07  | 5.7E-07  | 5.4E-07  | 5.1E-07  |
| 15             | 1.5E-06  | 1.4E-06  | 1.3E-06  | 1.2E-06  | 1.1E-06  | 1.0E-06  | 9.5E-07  | 9.0E-07  | 8.5E-07  | 8.0E-07  | 7.5E-07  | 7.0E-07  | 6.5E-07  | 6.0E-07  | 5.5E-07  | 5.0E-07  |
| 20             | 2.0E-06  | 1.9E-06  | 1.8E-06  | 1.7E-06  | 1.6E-06  | 1.5E-06  | 1.4E-06  | 1.3E-06  | 1.2E-06  | 1.1E-06  | 1.0E-06  | 9.5E-07  | 9.0E-07  | 8.5E-07  | 8.0E-07  | 7.5E-07  |
| 25             | 2.5E-06  | 2.4E-06  | 2.3E-06  | 2.2E-06  | 2.1E-06  | 2.0E-06  | 1.9E-06  | 1.8E-06  | 1.7E-06  | 1.6E-06  | 1.5E-06  | 1.4E-06  | 1.3E-06  | 1.2E-06  | 1.1E-06  | 1.0E-06  |
| 30             | 3.0E-06  | 2.9E-06  | 2.8E-06  | 2.7E-06  | 2.6E-06  | 2.5E-06  | 2.4E-06  | 2.3E-06  | 2.2E-06  | 2.1E-06  | 2.0E-06  | 1.9E-06  | 1.8E-06  | 1.7E-06  | 1.6E-06  | 1.5E-06  |
| 35             | 3.5E-06  | 3.4E-06  | 3.3E-06  | 3.2E-06  | 3.1E-06  | 3.0E-06  | 2.9E-06  | 2.8E-06  | 2.7E-06  | 2.6E-06  | 2.5E-06  | 2.4E-06  | 2.3E-06  | 2.2E-06  | 2.1E-06  | 2.0E-06  |
| 40             | 4.0E-06  | 3.9E-06  | 3.8E-06  | 3.7E-06  | 3.6E-06  | 3.5E-06  | 3.4E-06  | 3.3E-06  | 3.2E-06  | 3.1E-06  | 3.0E-06  | 2.9E-06  | 2.8E-06  | 2.7E-06  | 2.6E-06  | 2.5E-06  |
| 45             | 4.5E-06  | 4.4E-06  | 4.3E-06  | 4.2E-06  | 4.1E-06  | 4.0E-06  | 3.9E-06  | 3.8E-06  | 3.7E-06  | 3.6E-06  | 3.5E-06  | 3.4E-06  | 3.3E-06  | 3.2E-06  | 3.1E-06  | 3.0E-06  |
| 50             | 5.0E-06  | 4.9E-06  | 4.8E-06  | 4.7E-06  | 4.6E-06  | 4.5E-06  | 4.4E-06  | 4.3E-06  | 4.2E-06  | 4.1E-06  | 4.0E-06  | 3.9E-06  | 3.8E-06  | 3.7E-06  | 3.6E-06  | 3.5E-06  |
| 55             | 5.5E-06  | 5.4E-06  | 5.3E-06  | 5.2E-06  | 5.1E-06  | 5.0E-06  | 4.9E-06  | 4.8E-06  | 4.7E-06  | 4.6E-06  | 4.5E-06  | 4.4E-06  | 4.3E-06  | 4.2E-06  | 4.1E-06  | 4.0E-06  |
| 60             | 6.0E-06  | 5.9E-06  | 5.8E-06  | 5.7E-06  | 5.6E-06  | 5.5E-06  | 5.4E-06  | 5.3E-06  | 5.2E-06  | 5.1E-06  | 5.0E-06  | 4.9E-06  | 4.8E-06  | 4.7E-06  | 4.6E-06  | 4.5E-06  |
| 65             | 6.5E-06  | 6.4E-06  | 6.3E-06  | 6.2E-06  | 6.1E-06  | 6.0E-06  | 5.9E-06  | 5.8E-06  | 5.7E-06  | 5.6E-06  | 5.5E-06  | 5.4E-06  | 5.3E-06  | 5.2E-06  | 5.1E-06  | 5.0E-06  |
| 70             | 7.0E-06  | 6.9E-06  | 6.8E-06  | 6.7E-06  | 6.6E-06  | 6.5E-06  | 6.4E-06  | 6.3E-06  | 6.2E-06  | 6.1E-06  | 6.0E-06  | 5.9E-06  | 5.8E-06  | 5.7E-06  | 5.6E-06  | 5.5E-06  |
| 75             | 7.5E-06  | 7.4E-06  | 7.3E-06  | 7.2E-06  | 7.1E-06  | 7.0E-06  | 6.9E-06  | 6.8E-06  | 6.7E-06  | 6.6E-06  | 6.5E-06  | 6.4E-06  | 6.3E-06  | 6.2E-06  | 6.1E-06  | 6.0E-06  |
| 80             | 8.0E-06  | 7.9E-06  | 7.8E-06  | 7.7E-06  | 7.6E-06  | 7.5E-06  | 7.4E-06  | 7.3E-06  | 7.2E-06  | 7.1E-06  | 7.0E-06  | 6.9E-06  | 6.8E-06  | 6.7E-06  | 6.6E-06  | 6.5E-06  |
| 85             | 8.5E-06  | 8.4E-06  | 8.3E-06  | 8.2E-06  | 8.1E-06  | 8.0E-06  | 7.9E-06  | 7.8E-06  | 7.7E-06  | 7.6E-06  | 7.5E-06  | 7.4E-06  | 7.3E-06  | 7.2E-06  | 7.1E-06  | 7.0E-06  |
| 90             | 9.0E-06  | 8.9E-06  | 8.8E-06  | 8.7E-06  | 8.6E-06  | 8.5E-06  | 8.4E-06  | 8.3E-06  | 8.2E-06  | 8.1E-06  | 8.0E-06  | 7.9E-06  | 7.8E-06  | 7.7E-06  | 7.6E-06  | 7.5E-06  |
| 95             | 9.5E-06  | 9.4E-06  | 9.3E-06  | 9.2E-06  | 9.1E-06  | 9.0E-06  | 8.9E-06  | 8.8E-06  | 8.7E-06  | 8.6E-06  | 8.5E-06  | 8.4E-06  | 8.3E-06  | 8.2E-06  | 8.1E-06  | 8.0E-06  |
| 100            | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  | 9.4E-06  | 9.3E-06  | 9.2E-06  | 9.1E-06  | 9.0E-06  | 8.9E-06  | 8.8E-06  | 8.7E-06  | 8.6E-06  | 8.5E-06  |
| 105            | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  | 9.4E-06  | 9.3E-06  | 9.2E-06  | 9.1E-06  | 9.0E-06  | 8.9E-06  | 8.8E-06  | 8.7E-06  | 8.6E-06  |
| 110            | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  | 9.4E-06  | 9.3E-06  | 9.2E-06  | 9.1E-06  | 9.0E-06  | 8.9E-06  | 8.8E-06  | 8.7E-06  |
| 115            | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  | 9.4E-06  | 9.3E-06  | 9.2E-06  | 9.1E-06  | 9.0E-06  | 8.9E-06  | 8.8E-06  |
| 120            | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  | 9.4E-06  | 9.3E-06  | 9.2E-06  | 9.1E-06  | 9.0E-06  | 8.9E-06  |
| 125            | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  | 9.4E-06  | 9.3E-06  | 9.2E-06  | 9.1E-06  | 9.0E-06  |
| 130            | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  | 9.4E-06  | 9.3E-06  | 9.2E-06  | 9.1E-06  |
| 135            | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  | 9.4E-06  | 9.3E-06  | 9.2E-06  |
| 140            | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  | 9.4E-06  | 9.3E-06  |
| 145            | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  | 9.4E-06  |
| 150            | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  | 9.5E-06  |
| 155            | 1.55E-05 | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  | 9.6E-06  |
| 160            | 1.6E-05  | 1.55E-05 | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  | 9.7E-06  |
| 165            | 1.65E-05 | 1.6E-05  | 1.55E-05 | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  | 9.8E-06  |
| 170            | 1.7E-05  | 1.65E-05 | 1.6E-05  | 1.55E-05 | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  | 9.9E-06  |
| 175            | 1.75E-05 | 1.7E-05  | 1.65E-05 | 1.6E-05  | 1.55E-05 | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 | 1.0E-05  |
| 180            | 1.8E-05  | 1.75E-05 | 1.7E-05  | 1.65E-05 | 1.6E-05  | 1.55E-05 | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  | 1.05E-05 |
| 185            | 1.85E-05 | 1.8E-05  | 1.75E-05 | 1.7E-05  | 1.65E-05 | 1.6E-05  | 1.55E-05 | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 | 1.1E-05  |
| 190            | 1.9E-05  | 1.85E-05 | 1.8E-05  | 1.75E-05 | 1.7E-05  | 1.65E-05 | 1.6E-05  | 1.55E-05 | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  | 1.15E-05 |
| 195            | 1.95E-05 | 1.9E-05  | 1.85E-05 | 1.8E-05  | 1.75E-05 | 1.7E-05  | 1.65E-05 | 1.6E-05  | 1.55E-05 | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 | 1.2E-05  |
| 200            | 2.0E-05  | 1.95E-05 | 1.9E-05  | 1.85E-05 | 1.8E-05  | 1.75E-05 | 1.7E-05  | 1.65E-05 | 1.6E-05  | 1.55E-05 | 1.5E-05  | 1.45E-05 | 1.4E-05  | 1.35E-05 | 1.3E-05  | 1.25E-05 |

MAX  
CONC 6.9E-06 6.8E-06 6.7E-06 6.6E-06 6.5E-06 6.4E-06 6.3E-06 6.2E-06 6.1E-06 6.0E-06 5.9E-06 5.8E-06 5.7E-06 5.6E-06 5.5E-06 5.4E-06 5.3E-06  
DIST(MI) 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-18

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
STACK RELEASE  
STABILITY UNSTABLE  
SPEED 3. MPH  
LOW FLOW  
147- 159-  
145 168 181

| WIND DIRECTION RANGES   | SW | WSW | W  | WNW | NW  | N   |
|---|----|-----|----|-----|-----|-----|
| 12- 34- 57- 78- 102- 124- 147- 159-<br>327- 349- 371- 393- 415- 437- 459- 481-<br>326 348 370 392 414 436 458 480 | 33 | 56  | 78 | 101 | 123 | 145 |

| DISTANCE MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | N       |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4              | 8.2E-07 | 7.7E-07 | 7.7E-07 | 7.7E-07 | 7.7E-07 | 7.8E-06 | 7.3E-06 | 3.9E-06 | 3.9E-06 | 8.4E-06 | 5.4E-06 | 6.2E-06 | 6.2E-06 | 7.8E-06 | 6.7E-06 |
| 5              | 1.0E-06 | 9.7E-07 | 9.7E-07 | 9.7E-07 | 9.7E-07 | 8.1E-06 | 8.1E-06 | 5.0E-06 | 5.0E-06 | 8.8E-06 | 5.8E-06 | 6.6E-06 | 6.6E-06 | 8.1E-06 | 7.0E-06 |
| 6              | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 8.3E-06 | 8.3E-06 | 4.1E-06 | 4.1E-06 | 9.1E-06 | 6.1E-06 | 6.9E-06 | 6.9E-06 | 8.3E-06 | 7.2E-06 |
| 7              | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 8.5E-06 | 8.5E-06 | 4.3E-06 | 4.3E-06 | 9.3E-06 | 6.3E-06 | 7.1E-06 | 7.1E-06 | 8.5E-06 | 7.4E-06 |
| 8              | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 8.7E-06 | 8.7E-06 | 4.5E-06 | 4.5E-06 | 9.5E-06 | 6.5E-06 | 7.3E-06 | 7.3E-06 | 8.7E-06 | 7.6E-06 |
| 9              | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 8.9E-06 | 8.9E-06 | 4.7E-06 | 4.7E-06 | 9.7E-06 | 6.7E-06 | 7.5E-06 | 7.5E-06 | 8.9E-06 | 7.8E-06 |
| 10             | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 9.1E-06 | 9.1E-06 | 4.9E-06 | 4.9E-06 | 9.9E-06 | 6.9E-06 | 7.7E-06 | 7.7E-06 | 9.1E-06 | 8.0E-06 |
| 11             | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 9.3E-06 | 9.3E-06 | 5.1E-06 | 5.1E-06 | 1.0E-05 | 7.1E-06 | 7.9E-06 | 7.9E-06 | 9.3E-06 | 8.2E-06 |
| 12             | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 9.5E-06 | 9.5E-06 | 5.3E-06 | 5.3E-06 | 1.0E-05 | 7.3E-06 | 8.1E-06 | 8.1E-06 | 9.5E-06 | 8.4E-06 |
| 13             | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 9.7E-06 | 9.7E-06 | 5.5E-06 | 5.5E-06 | 1.0E-05 | 7.5E-06 | 8.3E-06 | 8.3E-06 | 9.7E-06 | 8.6E-06 |
| 14             | 2.8E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06 | 9.9E-06 | 9.9E-06 | 5.7E-06 | 5.7E-06 | 1.0E-05 | 7.7E-06 | 8.5E-06 | 8.5E-06 | 9.9E-06 | 8.8E-06 |
| 15             | 3.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 1.0E-05 | 1.0E-05 | 5.9E-06 | 5.9E-06 | 1.0E-05 | 7.9E-06 | 8.7E-06 | 8.7E-06 | 1.0E-05 | 8.9E-06 |
| 16             | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 1.0E-05 | 1.0E-05 | 6.1E-06 | 6.1E-06 | 1.0E-05 | 8.1E-06 | 8.9E-06 | 8.9E-06 | 1.0E-05 | 9.1E-06 |
| 17             | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 1.0E-05 | 1.0E-05 | 6.3E-06 | 6.3E-06 | 1.0E-05 | 8.3E-06 | 9.1E-06 | 9.1E-06 | 1.0E-05 | 9.3E-06 |
| 18             | 3.6E-06 | 3.6E-06 | 3.6E-06 | 3.6E-06 | 3.6E-06 | 1.0E-05 | 1.0E-05 | 6.5E-06 | 6.5E-06 | 1.0E-05 | 8.5E-06 | 9.3E-06 | 9.3E-06 | 1.0E-05 | 9.5E-06 |
| 19             | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 1.0E-05 | 1.0E-05 | 6.7E-06 | 6.7E-06 | 1.0E-05 | 8.7E-06 | 9.5E-06 | 9.5E-06 | 1.0E-05 | 9.7E-06 |
| 20             | 4.0E-06 | 4.0E-06 | 4.0E-06 | 4.0E-06 | 4.0E-06 | 1.0E-05 | 1.0E-05 | 6.9E-06 | 6.9E-06 | 1.0E-05 | 8.9E-06 | 9.7E-06 | 9.7E-06 | 1.0E-05 | 9.9E-06 |
| 21             | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 1.0E-05 | 1.0E-05 | 7.1E-06 | 7.1E-06 | 1.0E-05 | 9.1E-06 | 9.9E-06 | 9.9E-06 | 1.0E-05 | 1.0E-05 |
| 22             | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 1.0E-05 | 1.0E-05 | 7.3E-06 | 7.3E-06 | 1.0E-05 | 9.3E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 23             | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 1.0E-05 | 1.0E-05 | 7.5E-06 | 7.5E-06 | 1.0E-05 | 9.5E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 24             | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 1.0E-05 | 1.0E-05 | 7.7E-06 | 7.7E-06 | 1.0E-05 | 9.7E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 25             | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 1.0E-05 | 1.0E-05 | 7.9E-06 | 7.9E-06 | 1.0E-05 | 9.9E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 26             | 5.2E-06 | 5.2E-06 | 5.2E-06 | 5.2E-06 | 5.2E-06 | 1.0E-05 | 1.0E-05 | 8.1E-06 | 8.1E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 27             | 5.4E-06 | 5.4E-06 | 5.4E-06 | 5.4E-06 | 5.4E-06 | 1.0E-05 | 1.0E-05 | 8.3E-06 | 8.3E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 28             | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 1.0E-05 | 1.0E-05 | 8.5E-06 | 8.5E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 29             | 5.8E-06 | 5.8E-06 | 5.8E-06 | 5.8E-06 | 5.8E-06 | 1.0E-05 | 1.0E-05 | 8.7E-06 | 8.7E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 30             | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 1.0E-05 | 1.0E-05 | 8.9E-06 | 8.9E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 31             | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 1.0E-05 | 1.0E-05 | 9.1E-06 | 9.1E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 32             | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 1.0E-05 | 1.0E-05 | 9.3E-06 | 9.3E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 33             | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 1.0E-05 | 1.0E-05 | 9.5E-06 | 9.5E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 34             | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 1.0E-05 | 1.0E-05 | 9.7E-06 | 9.7E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 35             | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 1.0E-05 | 1.0E-05 | 9.9E-06 | 9.9E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 36             | 7.2E-06 | 7.2E-06 | 7.2E-06 | 7.2E-06 | 7.2E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 37             | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 38             | 7.6E-06 | 7.6E-06 | 7.6E-06 | 7.6E-06 | 7.6E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 39             | 7.8E-06 | 7.8E-06 | 7.8E-06 | 7.8E-06 | 7.8E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 40             | 8.0E-06 | 8.0E-06 | 8.0E-06 | 8.0E-06 | 8.0E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 41             | 8.2E-06 | 8.2E-06 | 8.2E-06 | 8.2E-06 | 8.2E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 42             | 8.4E-06 | 8.4E-06 | 8.4E-06 | 8.4E-06 | 8.4E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 43             | 8.6E-06 | 8.6E-06 | 8.6E-06 | 8.6E-06 | 8.6E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 44             | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 45             | 9.0E-06 | 9.0E-06 | 9.0E-06 | 9.0E-06 | 9.0E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 46             | 9.2E-06 | 9.2E-06 | 9.2E-06 | 9.2E-06 | 9.2E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 47             | 9.4E-06 | 9.4E-06 | 9.4E-06 | 9.4E-06 | 9.4E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 48             | 9.6E-06 | 9.6E-06 | 9.6E-06 | 9.6E-06 | 9.6E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 49             | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |
| 50             | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 |

| MAX CONC | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| DIST(MI) | .7      | .7      | .7      | .7      | .7      | .7      | .7      | .7      | .7      | .7      | .7      | .7      | .7      | .7      | .7      |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-10

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
STACK RELEASE LOW FLOW  
STABILITY UNSTABLE  
SPEED 8. MPH

|          |          | 192-                     | 214-     | 237-     | 259-     | 282-    | 304-     | 327-     | 348-     | 13-      | 34-      | 57-      | 79-      | 103-     | 124-     | 147-     | 169-    |
|----------|----------|--------------------------|----------|----------|----------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
|          |          | 213                      | 236      | 268      | 281      | 303     | 326      | 348      | 11       | 33       | 55       | 78       | 101      | 123      | 146      | 168      | 191     |
|          |          | WIND DIRECTION RANGES    |          |          |          |         |          |          |          |          |          |          |          |          |          |          |         |
|          |          | DOWN WIND SECTOR BEARING |          |          |          |         |          |          |          |          |          |          |          |          |          |          |         |
| DISTANCE | MILES    | NNE                      | NE       | ENE      | E        | ESE     | SE       | SSSE     | S        | SSW      | SW       | WSW      | W        | WNW      | NW       | NNW      | N       |
| .4       | 6.2E-07* | 5.7E-07*                 | 5.7E-07  | 5.7E-07  | 5.7E-07  | 5.7E-07 | 5.4E-06  | 5.1E-06  | 2.4E-06  | 2.8E-06  | 3.8E-06  | 3.8E-06  | 4.3E-06  | 4.3E-06  | 5.4E-06  | 4.6E-06  | 5.7E-07 |
| .4       | 7.6E-07  | 7.1E-07                  | 7.1E-07* | 7.1E-07  | 7.1E-07  | 7.1E-07 | 5.5E-06  | 5.1E-06  | 2.6E-06  | 3.5E-06  | 4.0E-06  | 4.0E-06  | 4.5E-06  | 4.5E-06  | 5.5E-06  | 4.8E-06  | 7.1E-07 |
| .4*      | 9.0E-07  | 8.5E-07                  | 8.5E-07  | 8.5E-07  | 8.5E-07  | 8.5E-07 | 5.6E-06  | 5.1E-06  | 2.8E-06  | 3.7E-06  | 4.1E-06  | 4.1E-06  | 4.7E-06  | 4.7E-06  | 5.6E-06  | 4.9E-06* | 8.5E-07 |
| .5       | 1.3E-06  | 1.3E-06                  | 1.3E-06  | 1.3E-06  | 1.3E-06  | 1.3E-06 | 5.6E-06  | 5.1E-06  | 5.1E-06  | 4.4E-06* | 4.6E-06  | 3.4E-06  | 4.9E-06  | 4.9E-06  | 5.6E-06  | 5.1E-06  | 1.3E-06 |
| .5       | 1.4E-06  | 1.4E-06                  | 1.4E-06  | 1.4E-06* | 1.4E-06  | 1.4E-06 | 5.6E-06  | 5.1E-06  | 5.4E-06  | 4.4E-06  | 4.8E-06  | 3.5E-06  | 4.9E-06  | 4.9E-06  | 5.6E-06  | 5.1E-06  | 1.4E-06 |
| .5       | 1.5E-06  | 1.5E-06                  | 1.5E-06  | 1.5E-06  | 1.5E-06  | 1.5E-06 | 5.5E-06  | 5.5E-06  | 5.5E-06  | 4.8E-06  | 4.8E-06* | 4.1E-06  | 4.8E-06  | 4.8E-06  | 5.5E-06  | 5.0E-06  | 1.5E-06 |
| .5       | 1.7E-06  | 1.7E-06                  | 1.7E-06  | 1.7E-06  | 1.7E-06  | 1.7E-06 | 5.5E-06  | 5.7E-06  | 5.7E-06  | 4.6E-06  | 5.1E-06  | 5.1E-06* | 4.8E-06  | 4.8E-06* | 5.3E-06  | 4.9E-06  | 1.7E-06 |
| .6       | 2.0E-06  | 1.9E-06                  | 1.9E-06  | 1.9E-06  | 1.9E-06  | 1.9E-06 | 5.1E-06  | 5.4E-06  | 5.4E-06* | 4.8E-06  | 5.1E-06  | 5.1E-06  | 4.8E-06* | 4.9E-06  | 5.0E-06* | 4.7E-06  | 1.9E-06 |
| .6       | 2.1E-06  | 2.0E-06                  | 2.0E-06  | 2.0E-06  | 2.0E-06  | 2.0E-06 | 4.7E-06  | 5.0E-06* | 5.0E-06  | 4.8E-06  | 4.7E-06  | 4.9E-06  | 4.3E-06  | 4.7E-06  | 4.6E-06  | 4.4E-06  | 2.3E-06 |
| .7       | 2.1E-06  | 2.1E-06                  | 2.1E-06  | 2.1E-06  | 2.1E-06  | 2.1E-06 | 4.6E-06* | 4.8E-06  | 5.0E-06  | 4.4E-06  | 4.6E-06  | 4.7E-06  | 4.4E-06  | 4.6E-06  | 4.5E-06  | 4.3E-06  | 2.3E-06 |
| .7       | 2.1E-06  | 2.1E-06                  | 2.1E-06  | 2.1E-06  | 2.1E-06* | 4.5E-06 | 4.7E-06  | 4.9E-06  | 5.0E-06  | 4.7E-06  | 4.6E-06  | 4.6E-06  | 4.3E-06  | 4.6E-06  | 4.4E-06  | 4.2E-06  | 2.3E-06 |
| 1.0      | 1.9E-06  | 1.9E-06                  | 1.9E-06  | 1.9E-06  | 1.9E-06  | 1.9E-06 | 3.0E-06  | 3.0E-06  | 3.0E-06  | 3.0E-06  | 3.1E-06  | 2.9E-06  | 2.9E-06  | 2.9E-06  | 2.9E-06  | 2.9E-06  | 2.0E-06 |
| 1.5      | 1.3E-06  | 1.5E-06                  | 1.3E-06  | 1.3E-06  | 1.3E-06  | 1.3E-06 | 1.6E-06  | 1.6E-06  | 1.6E-06  | 1.7E-06  | 1.6E-06  | 1.6E-06  | 1.7E-06  | 1.7E-06  | 1.6E-06  | 1.6E-06  | 1.3E-06 |
| 2.0      | 1.0E-06  | 1.0E-06                  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06 | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06 |
| 2.5      | 7.2E-07  | 7.1E-07                  | 7.1E-07  | 7.1E-07  | 7.1E-07  | 7.1E-07 | 6.8E-07  | 7.1E-07  | 7.1E-07  | 7.2E-07  | 7.2E-07  | 7.3E-07  | 7.2E-07  | 7.2E-07  | 7.2E-07  | 7.1E-07  | 7.1E-07 |
| 3.0      | 5.3E-07  | 5.3E-07                  | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07 | 5.2E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.4E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07 |
| 3.5      | 4.1E-07  | 4.1E-07                  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07 | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07  | 4.1E-07 |
| 4.0      | 3.3E-07  | 3.3E-07                  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07 | 3.2E-07  | 3.2E-07  | 3.2E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07 |
| 4.5      | 2.7E-07  | 2.7E-07                  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07 | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07 |
| 5.0      | 2.2E-07  | 2.2E-07                  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07 | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07  | 2.2E-07 |
| 6.0      | 1.6E-07  | 1.6E-07                  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07 | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07  | 1.6E-07 |
| 7.0      | 1.3E-07  | 1.3E-07                  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07 | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07  | 1.3E-07 |
| 8.0      | 1.0E-07  | 1.0E-07                  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07 | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07 |
| 9.0      | 8.2E-08  | 8.2E-08                  | 8.2E-08  | 8.1E-08  | 8.2E-08  | 8.1E-08 | 8.1E-08  | 8.1E-08  | 8.1E-08  | 8.1E-08  | 8.2E-08  | 8.2E-08  | 8.2E-08  | 8.2E-08  | 8.2E-08  | 8.2E-08  | 8.2E-08 |
| 10.0     | 6.8E-08  | 6.8E-08                  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08 | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08  | 6.8E-08 |
| 15.0     | 3.4E-08  | 3.4E-08                  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08 | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08  | 3.4E-08 |
| 20.0     | 2.1E-08  | 2.1E-08                  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08 | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08 |
| 25.0     | 1.4E-08  | 1.4E-08                  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08 | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08  | 1.4E-08 |
| 30.0     | 1.0E-08  | 1.0E-08                  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08 | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08 |
| 40.0     | 6.3E-09  | 6.3E-09                  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09 | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09  | 6.3E-09 |
| 50.0     | 4.3E-09  | 4.3E-09                  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09 | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09  | 4.3E-09 |
| MAX      |          |                          |          |          |          |         |          |          |          |          |          |          |          |          |          |          |         |
| CONC     | 2.1E-06  | 2.1E-06                  | 2.1E-06  | 2.1E-06  | 2.1E-06  | 5.6E-06 | 5.7E-06  | 5.7E-06  | 5.0E-06  | 5.1E-06  | 5.1E-06  | 4.9E-06  | 4.9E-06  | 5.6E-06  | 5.1E-06  | 2.3E-06  |         |
| DIST(MI) | .7       | .7                       | .7       | .7       | .7       | .5      | .5       | .5       | .7       | .5       | .5       | .5       | .5       | .5       | .5       | .5       | .7      |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. DQ-20





PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
STACK RELEASE  
STABILITY  
SPEED 3. MPH  
LOW FLOW  
STABLE  
147-  
169-  
191

| WIND DIRECTION RANGES | 34-36   | 37-38   | 39-40   | 41-42   | 43-44   | 45-46   | 47-48   | 49-50   | 51-52   | 53-54   | 55-56   | 57-58   | 59-60   | 61-62   | 63-64   | 65-66   | 67-68   | 69-70   | 71-72   | 73-74   | 75-76   | 77-78   | 79-80   | 81-82   | 83-84   | 85-86   | 87-88   | 89-90   | 91-92   | 93-94   | 95-96   | 97-98   | 99-100  |         |         |         |         |         |          |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |            |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 192-213               | 214-236 | 237-258 | 259-281 | 282-303 | 304-326 | 327-348 | 349-369 | 370-391 | 392-412 | 413-433 | 434-454 | 455-475 | 476-495 | 496-515 | 516-535 | 536-555 | 556-575 | 576-595 | 596-615 | 616-635 | 636-655 | 656-675 | 676-695 | 696-715 | 716-735 | 736-755 | 756-775 | 776-795 | 796-815 | 816-835 | 836-855 | 856-875 | 876-895 | 896-915 | 916-935 | 936-955 | 956-975 | 976-995 | 996-1015 | 1016-1035 | 1036-1055 | 1056-1075 | 1076-1095 | 1096-1115 | 1116-1135 | 1136-1155 | 1156-1175 | 1176-1195 | 1196-1215 | 1216-1235 | 1236-1255 | 1256-1275 | 1276-1295 | 1296-1315 | 1316-1335 | 1336-1355 | 1356-1375 | 1376-1395 | 1396-1415 | 1416-1435 | 1436-1455 | 1456-1475 | 1476-1495 | 1496-1515 | 1516-1535 | 1536-1555 | 1556-1575 | 1576-1595 | 1596-1615 | 1616-1635 | 1636-1655 | 1656-1675 | 1676-1695 | 1696-1715 | 1716-1735 | 1736-1755 | 1756-1775 | 1776-1795 | 1796-1815 | 1816-1835 | 1836-1855 | 1856-1875 | 1876-1895 | 1896-1915 | 1916-1935 | 1936-1955 | 1956-1975 | 1976-1995 | 1996-2015 | 2016-2035 | 2036-2055 | 2056-2075 | 2076-2095 | 2096-2115 | 2116-2135 | 2136-2155 | 2156-2175 | 2176-2195 | 2196-2215 | 2216-2235 | 2236-2255 | 2256-2275 | 2276-2295 | 2296-2315 | 2316-2335 | 2336-2355 | 2356-2375 | 2376-2395 | 2396-2415 | 2416-2435 | 2436-2455 | 2456-2475 | 2476-2495 | 2496-2515 | 2516-2535 | 2536-2555 | 2556-2575 | 2576-2595 | 2596-2615 | 2616-2635 | 2636-2655 | 2656-2675 | 2676-2695 | 2696-2715 | 2716-2735 | 2736-2755 | 2756-2775 | 2776-2795 | 2796-2815 | 2816-2835 | 2836-2855 | 2856-2875 | 2876-2895 | 2896-2915 | 2916-2935 | 2936-2955 | 2956-2975 | 2976-2995 | 2996-3015 | 3016-3035 | 3036-3055 | 3056-3075 | 3076-3095 | 3096-3115 | 3116-3135 | 3136-3155 | 3156-3175 | 3176-3195 | 3196-3215 | 3216-3235 | 3236-3255 | 3256-3275 | 3276-3295 | 3296-3315 | 3316-3335 | 3336-3355 | 3356-3375 | 3376-3395 | 3396-3415 | 3416-3435 | 3436-3455 | 3456-3475 | 3476-3495 | 3496-3515 | 3516-3535 | 3536-3555 | 3556-3575 | 3576-3595 | 3596-3615 | 3616-3635 | 3636-3655 | 3656-3675 | 3676-3695 | 3696-3715 | 3716-3735 | 3736-3755 | 3756-3775 | 3776-3795 | 3796-3815 | 3816-3835 | 3836-3855 | 3856-3875 | 3876-3895 | 3896-3915 | 3916-3935 | 3936-3955 | 3956-3975 | 3976-3995 | 3996-4015 | 4016-4035 | 4036-4055 | 4056-4075 | 4076-4095 | 4096-4115 | 4116-4135 | 4136-4155 | 4156-4175 | 4176-4195 | 4196-4215 | 4216-4235 | 4236-4255 | 4256-4275 | 4276-4295 | 4296-4315 | 4316-4335 | 4336-4355 | 4356-4375 | 4376-4395 | 4396-4415 | 4416-4435 | 4436-4455 | 4456-4475 | 4476-4495 | 4496-4515 | 4516-4535 | 4536-4555 | 4556-4575 | 4576-4595 | 4596-4615 | 4616-4635 | 4636-4655 | 4656-4675 | 4676-4695 | 4696-4715 | 4716-4735 | 4736-4755 | 4756-4775 | 4776-4795 | 4796-4815 | 4816-4835 | 4836-4855 | 4856-4875 | 4876-4895 | 4896-4915 | 4916-4935 | 4936-4955 | 4956-4975 | 4976-4995 | 4996-5015 | 5016-5035 | 5036-5055 | 5056-5075 | 5076-5095 | 5096-5115 | 5116-5135 | 5136-5155 | 5156-5175 | 5176-5195 | 5196-5215 | 5216-5235 | 5236-5255 | 5256-5275 | 5276-5295 | 5296-5315 | 5316-5335 | 5336-5355 | 5356-5375 | 5376-5395 | 5396-5415 | 5416-5435 | 5436-5455 | 5456-5475 | 5476-5495 | 5496-5515 | 5516-5535 | 5536-5555 | 5556-5575 | 5576-5595 | 5596-5615 | 5616-5635 | 5636-5655 | 5656-5675 | 5676-5695 | 5696-5715 | 5716-5735 | 5736-5755 | 5756-5775 | 5776-5795 | 5796-5815 | 5816-5835 | 5836-5855 | 5856-5875 | 5876-5895 | 5896-5915 | 5916-5935 | 5936-5955 | 5956-5975 | 5976-5995 | 5996-6015 | 6016-6035 | 6036-6055 | 6056-6075 | 6076-6095 | 6096-6115 | 6116-6135 | 6136-6155 | 6156-6175 | 6176-6195 | 6196-6215 | 6216-6235 | 6236-6255 | 6256-6275 | 6276-6295 | 6296-6315 | 6316-6335 | 6336-6355 | 6356-6375 | 6376-6395 | 6396-6415 | 6416-6435 | 6436-6455 | 6456-6475 | 6476-6495 | 6496-6515 | 6516-6535 | 6536-6555 | 6556-6575 | 6576-6595 | 6596-6615 | 6616-6635 | 6636-6655 | 6656-6675 | 6676-6695 | 6696-6715 | 6716-6735 | 6736-6755 | 6756-6775 | 6776-6795 | 6796-6815 | 6816-6835 | 6836-6855 | 6856-6875 | 6876-6895 | 6896-6915 | 6916-6935 | 6936-6955 | 6956-6975 | 6976-6995 | 6996-7015 | 7016-7035 | 7036-7055 | 7056-7075 | 7076-7095 | 7096-7115 | 7116-7135 | 7136-7155 | 7156-7175 | 7176-7195 | 7196-7215 | 7216-7235 | 7236-7255 | 7256-7275 | 7276-7295 | 7296-7315 | 7316-7335 | 7336-7355 | 7356-7375 | 7376-7395 | 7396-7415 | 7416-7435 | 7436-7455 | 7456-7475 | 7476-7495 | 7496-7515 | 7516-7535 | 7536-7555 | 7556-7575 | 7576-7595 | 7596-7615 | 7616-7635 | 7636-7655 | 7656-7675 | 7676-7695 | 7696-7715 | 7716-7735 | 7736-7755 | 7756-7775 | 7776-7795 | 7796-7815 | 7816-7835 | 7836-7855 | 7856-7875 | 7876-7895 | 7896-7915 | 7916-7935 | 7936-7955 | 7956-7975 | 7976-7995 | 7996-8015 | 8016-8035 | 8036-8055 | 8056-8075 | 8076-8095 | 8096-8115 | 8116-8135 | 8136-8155 | 8156-8175 | 8176-8195 | 8196-8215 | 8216-8235 | 8236-8255 | 8256-8275 | 8276-8295 | 8296-8315 | 8316-8335 | 8336-8355 | 8356-8375 | 8376-8395 | 8396-8415 | 8416-8435 | 8436-8455 | 8456-8475 | 8476-8495 | 8496-8515 | 8516-8535 | 8536-8555 | 8556-8575 | 8576-8595 | 8596-8615 | 8616-8635 | 8636-8655 | 8656-8675 | 8676-8695 | 8696-8715 | 8716-8735 | 8736-8755 | 8756-8775 | 8776-8795 | 8796-8815 | 8816-8835 | 8836-8855 | 8856-8875 | 8876-8895 | 8896-8915 | 8916-8935 | 8936-8955 | 8956-8975 | 8976-8995 | 8996-9015 | 9016-9035 | 9036-9055 | 9056-9075 | 9076-9095 | 9096-9115 | 9116-9135 | 9136-9155 | 9156-9175 | 9176-9195 | 9196-9215 | 9216-9235 | 9236-9255 | 9256-9275 | 9276-9295 | 9296-9315 | 9316-9335 | 9336-9355 | 9356-9375 | 9376-9395 | 9396-9415 | 9416-9435 | 9436-9455 | 9456-9475 | 9476-9495 | 9496-9515 | 9516-9535 | 9536-9555 | 9556-9575 | 9576-9595 | 9596-9615 | 9616-9635 | 9636-9655 | 9656-9675 | 9676-9695 | 9696-9715 | 9716-9735 | 9736-9755 | 9756-9775 | 9776-9795 | 9796-9815 | 9816-9835 | 9836-9855 | 9856-9875 | 9876-9895 | 9896-9915 | 9916-9935 | 9936-9955 | 9956-9975 | 9976-9995 | 9996-10015 | 10016-10035 | 10036-10055 | 10056-10075 | 10076-10095 | 10096-10115 | 10116-10135 | 10136-10155 | 10156-10175 | 10176-10195 | 10196-10215 | 10216-10235 | 10236-10255 | 10256-10275 | 10276-10295 | 10296-10315 | 10316-10335 | 10336-10355 | 10356-10375 | 10376-10395 | 10396-10415 | 10416-10435 | 10436-10455 | 10456-10475 | 10476-10495 | 10496-10515 | 10516-10535 | 10536-10555 | 10556-10575 | 10576-10595 | 10596-10615 | 10616-10635 | 10636-10655 | 10656-10675 | 10676-10695 | 10696-10715 | 10716-10735 | 10736-10755 | 10756-10775 | 10776-10795 | 10796-10815 | 10816-10835 | 10836-10855 | 10856-10875 | 10876-10895 | 10896-10915 | 10916-10935 | 10936-10955 | 10956-10975 | 10976-10995 | 10996-11015 | 11016-11035 | 11036-11055 | 11056-11075 | 11076-11095 | 11096-11115 | 11116-11135 | 11136-11155 | 11156-11175 | 11176-11195 | 11196-11215 | 11216-11235 | 11236-11255 | 11256-11275 | 11276-11295 | 11296-11315 | 11316-11335 | 11336-11355 | 11356-11375 | 11376-11395 | 11396-11415 | 11416-11435 | 11436-11455 | 11456-11475 | 11476-11495 | 11496-11515 | 11516-11535 | 11536-11555 | 11556-11575 | 11576-11595 | 11596-11615 | 11616-11635 | 11636-11655 | 11656-11675 | 11676-11695 | 11696-11715 | 11716-11735 | 11736-11755 | 11756-11775 | 11776-11795 | 11796-11815 | 11816-11835 | 11836-11855 | 11856-11875 | 11876-11895 | 11896-11915 | 11916-11935 | 11936-11955 | 11956-11975 | 11976-11995 | 11996-12015 | 12016-12035 | 12036-12055 | 12056-12075 | 12076-12095 | 12096-12115 | 12116-12135 | 12136-12155 | 12156-12175 | 12176-12195 | 12196-12215 | 12216-12235 | 12236-12255 | 12256-12275 | 12276-12295 | 12296-12315 | 12316-12335 | 12336-12355 | 12356-12375 | 12376-12395 | 12396-12415 | 12416-12435 | 12436-12455 | 12456-12475 | 12476-12495 | 12496-12515 | 12516-12535 | 12536-12555 | 12556-12575 | 12576-12595 | 12596-12615 | 12616-12635 | 12636-12655 | 12656-12675 | 12676-12695 | 12696-12715 | 12716-12735 | 12736-12755 | 12756-12775 | 12776-12795 | 12796-12815 | 12816-12835 | 12836-12855 | 12856-12875 | 12876-12895 | 12896-12915 | 12916-12935 | 12936-12955 | 12956-12975 | 12976-12995 | 12996-13015 | 13016-13035 | 13036-13055 | 13056-13075 | 13076-13095 | 13096-13115 | 13116-13135 | 13136-13155 | 13156-13175 | 13176-13195 | 13196-13215 | 13216-13235 | 13236-13255 | 13256-13275 | 13276-13295 | 13296-13315 | 13316-13335 | 13336-13355 | 13356-13375 | 13376-13395 | 13396-13415 | 13416-13435 | 13436-13455 | 13456-13475 | 13476-13495 | 13496-13515 | 13516-13535 | 13536-13555 | 13556-13575 | 13576-13595 | 13596-13615 | 13616-13635 | 13636-13655 | 13656-13675 | 13676-13695 | 13696-13715 | 13716-13735 | 13736-13755 | 13756-13775 | 13776-13795 | 13796-13815 | 13816-13835 | 13836-13855 | 13856-13875 | 13876-13895 | 13896-13915 | 13916-13935 | 13936-13955 | 13956-13975 | 13976-13995 | 13996-14015 | 14016-14035 | 14036-14055 | 14056-14075 | 14076-14095 | 14096-14115 | 14116-14135 | 14136-14155 | 14156-14175 | 14176-14195 | 14196-14215 | 14216-14235 | 14236-14255 | 14256-14275 | 14276-14295 | 14296-14315 | 14316-14335 | 14336-14355 | 14356-14375 | 14376-14395 | 14396-14415 | 14416-14435 | 14436-14455 | 14456-14475 | 14476-14495 | 14496-14515 | 14516-14535 | 14536-14555 | 14556-14575 | 14576-14595 | 14596-14615 | 14616-14635 | 14636-14655 | 14656-14675 | 14676-14695 | 14696-14715 | 14716-14735 | 14736-14755 | 14756-14775 | 14776-14795 | 14796-14815 | 14816-14835 | 14836-14855 | 14856-14875 | 14876-14895 | 14896-14915 | 14916-14935 | 14936-14955 | 14956-14975 | 14976-14995 | 14996-15015 | 15016-15035 | 15036-15055 | 15056-15075 | 15076-15095 | 15096-15115 | 15116-15135 | 15136-15155 | 15156-15175 | 15176-15195 | 15196-15215 | 15216-15235 | 15236-15255 |



PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
 STACK RELEASE  
 STABILITY. STABLE  
 SPEED S. MPH

WIND DIRECTION RANGES  
 12- 31- 78- 103- 124- 147- 169-  
 349- 37- 101- 123- 146- 168- 181

| DISTANCE<br>MILES | NE  | E   | ESE | SE  | SSE | S   | SSW | SW  | WSW | W   | WNW | NW  | NNW | N   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

MAX  
 CONC 1.1E-05 7.9E-06 5.4E-06 2.7E-06 2.2E-06 2.2E-06 2.0E-06 2.5E-06 1.8E-05 7.8E-06 8.2E-06 1.2E-05 8.9E-06 1.2E-05 1.3E-05  
 DIST(MI) 7.0 8.0 15.0 9.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0

TABLE NO. 09-23

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
 STACK RELEASE HIGH FLOW  
 STABILITY UNSTABLE  
 SPEED 1. MPH

| WIND DIRECTION RANGES    |          |          |          |          |          |          |          |          |          |          |          |          |         |          |          |         |         |      |      |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|----------|----------|---------|---------|------|------|
| 102-                     | 114-     | 127-     | 159-     | 182-     | 204-     | 227-     | 249-     | 272-     | 304-     | 327-     | 349-     | 12-      | 34-     | 87-      | 79-      | 102-    | 124-    | 147- | 169- |
| 213                      | 238      | 266      | 281      | 303      | 326      | 348      | 11       | 33       | 58       | 78       | 101      | 123      | 146     | 168      | 191      |         |         |      |      |
| DOWN WIND SECTOR BEARING |          |          |          |          |          |          |          |          |          |          |          |          |         |          |          |         |         |      |      |
| NNE                      | NE       | ENE      | E        | ESE      | SE       | SSE      | S        | SSW      | SW       | WSW      | W        | WNW      | NW      | NNW      | N        |         |         |      |      |
| DISTANCE MILES           |          |          |          |          |          |          |          |          |          |          |          |          |         |          |          |         |         |      |      |
| .4                       | 1.2E-12* | 1.0E-12* | 1.0E-12  | 1.0E-12  | 1.0E-12  | 3.3E-10  | 2.7E-10  | 3.3E-11  | 8.0E-11  | 1.2E-10  | 1.2E-10  | 1.7E-10  | 1.7E-10 | 3.3E-10  | 2.1E-10  | 1.0E-12 |         |      |      |
| .4                       | 8.4E-12  | 4.6E-12  | 4.6E-12* | 4.6E-12  | 4.6E-12  | 9.0E-10  | 9.0E-10  | 1.1E-10  | 2.3E-10  | 3.4E-10  | 3.4E-10  | 4.9E-10  | 4.9E-10 | 9.0E-10  | 5.9E-10  | 4.6E-12 |         |      |      |
| .4*                      | 1.8E-11  | 1.6E-11  | 1.6E-11  | 1.6E-11  | 1.6E-11  | 2.1E-09  | 2.1E-09  | 2.9E-10  | 6.0E-10  | 8.5E-10  | 8.5E-10  | 1.2E-09  | 1.2E-09 | 2.1E-09  | 1.4E-09* | 1.6E-11 |         |      |      |
| .5                       | 3.9E-10  | 3.1E-10  | 3.1E-10  | 3.1E-10  | 3.1E-10  | 1.5E-08  | 1.5E-08  | 1.1E-08  | 7.2E-09* | 8.3E-09  | 3.6E-09  | 9.8E-09  | 9.8E-09 | 1.8E-08  | 1.1E-08  | 3.1E-10 |         |      |      |
| .5                       | 7.2E-10  | 8.6E-10  | 8.6E-10  | 8.6E-10* | 6.6E-10  | 2.4E-08  | 2.4E-08  | 2.1E-08  | 1.2E-08  | 1.6E-08  | 6.8E-08  | 1.8E-08  | 1.6E-08 | 2.4E-08  | 1.8E-08  | 6.6E-10 |         |      |      |
| .5                       | 1.4E-09  | 1.3E-09  | 1.3E-09  | 1.3E-09  | 1.3E-09  | 3.8E-08  | 3.8E-08  | 3.8E-08  | 2.0E-08  | 2.6E-08* | 1.8E-08  | 2.6E-08  | 2.6E-08 | 3.8E-08  | 2.9E-08  | 1.3E-09 |         |      |      |
| .5                       | 4.5E-09  | 4.1E-09  | 4.1E-09  | 4.1E-09  | 4.1E-09  | 8.8E-08  | 8.8E-08  | 8.8E-08  | 5.1E-08  | 7.2E-08  | 7.2E-08* | 5.7E-08  | 5.7E-08 | 8.0E-08  | 6.3E-08  | 4.1E-09 |         |      |      |
| .6                       | 1.7E-08  | 1.6E-08  | 1.6E-08  | 1.6E-08  | 1.6E-08  | 2.1E-07  | 2.5E-07  | 2.5E-07* | 1.4E-07  | 2.1E-07  | 2.1E-07  | 1.4E-07* | 1.8E-07 | 1.9E-07* | 1.6E-07  | 1.6E-08 |         |      |      |
| .6                       | 4.6E-08  | 4.3E-08  | 4.3E-08  | 4.3E-08  | 4.3E-08  | 3.9E-07  | 4.5E-07* | 4.5E-07  | 3.4E-07  | 3.9E-07  | 4.2E-07  | 2.8E-07  | 3.9E-07 | 3.9E-07  | 3.6E-07  | 4.3E-08 |         |      |      |
| .7                       | 6.1E-08  | 5.8E-08  | 5.8E-08  | 5.8E-08  | 5.8E-08  | 4.6E-07* | 5.3E-07  | 5.1E-07  | 4.0E-07  | 4.6E-07  | 5.0E-07  | 4.0E-07  | 4.6E-07 | 4.3E-07  | 3.7E-07  | 7.4E-08 |         |      |      |
| .7                       | 7.8E-08  | 7.4E-08  | 7.4E-08  | 7.4E-08  | 7.4E-08* | 5.4E-07  | 6.2E-07  | 7.0E-07  | 7.4E-07  | 8.2E-07  | 8.8E-07  | 4.8E-07  | 8.8E-07 | 8.1E-07  | 4.4E-07  | 9.4E-08 |         |      |      |
| 1.0                      | 7.6E-07  | 7.4E-07  | 7.4E-07  | 7.4E-07  | 7.4E-07  | 2.4E-06  | 2.4E-06  | 2.4E-06  | 2.4E-06  | 2.6E-06  | 2.3E-06  | 2.2E-06  | 2.3E-06 | 2.3E-06  | 2.3E-06  | 2.4E-07 |         |      |      |
| 1.5                      | 1.8E-06  | 2.6E-06  | 1.8E-06  | 1.8E-06  | 1.8E-06  | 3.2E-06  | 3.2E-06  | 3.4E-06  | 3.6E-06  | 3.4E-06  | 3.3E-06  | 3.8E-06  | 3.8E-06 | 3.4E-06  | 3.2E-06  | 1.9E-06 |         |      |      |
| 2.0                      | 2.8E-06  | 2.8E-06  | 2.9E-06  | 2.8E-06  | 2.1E-06  | 2.9E-06  | 2.9E-06  | 3.0E-06  | 3.1E-06  | 3.3E-06  | 3.0E-06  | 3.1E-06  | 3.1E-06 | 3.1E-06  | 2.9E-06  | 2.1E-06 |         |      |      |
| 2.5                      | 2.6E-06  | 2.5E-06  | 2.5E-06  | 2.4E-06  | 2.2E-06  | 2.4E-06  | 2.4E-06  | 2.5E-06  | 2.5E-06  | 2.7E-06  | 2.6E-06  | 2.5E-06  | 2.5E-06 | 2.5E-06  | 2.4E-06  | 2.4E-06 |         |      |      |
| 3.0                      | 2.1E-06  | 2.0E-06  | 2.0E-06  | 2.0E-06  | 2.0E-06  | 2.0E-06  | 2.0E-06  | 2.0E-06  | 2.1E-06  | 2.2E-06  | 2.1E-06  | 2.0E-06  | 2.1E-06 | 2.1E-06  | 2.0E-06  | 2.1E-06 |         |      |      |
| 3.5                      | 1.7E-06  | 1.7E-06  | 1.7E-06  | 1.6E-06  | 1.6E-06  | 1.6E-06  | 1.6E-06  | 1.7E-06  | 1.7E-06  | 1.8E-06  | 1.7E-06  | 1.7E-06  | 1.7E-06 | 1.7E-06  | 1.7E-06  | 1.7E-06 |         |      |      |
| 4.0                      | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06  | 1.5E-06  | 1.4E-06  | 1.4E-06  | 1.4E-06 | 1.4E-06  | 1.4E-06  | 1.4E-06 |         |      |      |
| 4.8                      | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06  | 1.2E-06 | 1.2E-06  | 1.2E-06  | 1.2E-06 |         |      |      |
| 5.0                      | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06  | 9.9E-07  | 9.9E-07  | 1.0E-06  | 1.0E-06  | 1.1E-06  | 1.0E-06  | 1.0E-06  | 1.0E-06 | 1.0E-06  | 1.0E-06  | 1.0E-06 |         |      |      |
| 6.0                      | 7.7E-07  | 7.7E-07  | 7.6E-07  | 7.5E-07  | 7.6E-07  | 7.5E-07  | 7.5E-07  | 7.5E-07  | 7.6E-07  | 7.8E-07  | 7.7E-07  | 7.7E-07  | 7.8E-07 | 7.8E-07  | 7.8E-07  | 7.7E-07 |         |      |      |
| 7.0                      | 6.1E-07  | 6.0E-07  | 5.9E-07  | 5.9E-07  | 5.9E-07  | 5.9E-07  | 5.9E-07  | 5.9E-07  | 5.9E-07  | 6.1E-07  | 6.0E-07  | 6.0E-07  | 6.0E-07 | 6.0E-07  | 6.1E-07  | 6.1E-07 |         |      |      |
| 8.0                      | 4.8E-07  | 4.8E-07  | 4.8E-07  | 4.8E-07  | 4.8E-07  | 4.8E-07  | 4.8E-07  | 4.8E-07  | 4.8E-07  | 4.9E-07  | 4.8E-07  | 4.8E-07  | 4.8E-07 | 4.8E-07  | 4.8E-07  | 4.8E-07 |         |      |      |
| 8.0                      | 4.0E-07  | 4.0E-07  | 3.9E-07  | 3.9E-07  | 3.9E-07  | 3.9E-07  | 3.9E-07  | 3.9E-07  | 3.9E-07  | 4.0E-07  | 4.0E-07  | 4.0E-07  | 4.0E-07 | 4.0E-07  | 4.0E-07  | 4.0E-07 |         |      |      |
| 10.0                     | 3.4E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07  | 3.3E-07 | 3.3E-07  | 3.3E-07  | 3.3E-07 |         |      |      |
| 15.0                     | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07 | 1.7E-07  | 1.7E-07  | 1.7E-07 |         |      |      |
| 20.0                     | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07  | 1.0E-07 | 1.0E-07  | 1.0E-07  | 1.0E-07 |         |      |      |
| 25.0                     | 7.0E-08  | 7.0E-08  | 7.0E-08  | 7.0E-08  | 7.0E-08  | 7.0E-08  | 7.0E-08  | 7.0E-08  | 7.0E-08  | 7.0E-08  | 7.0E-08  | 7.0E-08  | 7.0E-08 | 7.0E-08  | 7.0E-08  | 7.0E-08 |         |      |      |
| 30.0                     | 5.2E-08  | 5.1E-08  | 5.1E-08  | 5.1E-08  | 5.1E-08  | 5.1E-08  | 5.1E-08  | 5.1E-08  | 5.1E-08  | 5.1E-08  | 5.1E-08  | 5.1E-08  | 5.1E-08 | 5.1E-08  | 5.1E-08  | 5.1E-08 |         |      |      |
| 40.0                     | 3.1E-08  | 3.1E-08  | 3.1E-08  | 3.1E-08  | 3.1E-08  | 3.1E-08  | 3.1E-08  | 3.1E-08  | 3.1E-08  | 3.1E-08  | 3.1E-08  | 3.1E-08  | 3.1E-08 | 3.1E-08  | 3.1E-08  | 3.1E-08 |         |      |      |
| 50.0                     | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08  | 2.1E-08 | 2.1E-08  | 2.1E-08  | 2.1E-08 |         |      |      |
| MAX                      | 2.8E-06  | 2.8E-06  | 2.9E-06  | 2.8E-06  | 2.2E-06  | 3.2E-06  | 3.2E-06  | 3.4E-06  | 3.6E-06  | 3.4E-06  | 3.3E-06  | 3.8E-06  | 3.8E-06 | 3.5E-06  | 3.4E-06  | 3.2E-06 | 2.4E-06 |      |      |
| DIST(MI)                 | 2.0      | 2.0      | 2.0      | 2.0      | 2.5      | 1.5      | 1.5      | 1.5      | 1.5      | 1.5      | 1.5      | 1.5      | 1.5     | 1.5      | 1.5      | 2.5     |         |      |      |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-24

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
STACK RELEASE  
STABILITY UNSTABLE  
SPEED 3. MPH  
HIGH FLOW

|      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192- | 215- | 237- | 289- | 304- | 327- | 349- | 12- | 34- | 87- | 79- | 102- | 124- | 147- | 168- |
| 213  | 236  | 258  | 281  | 303  | 326  | 348  | 11  | 33  | 86  | 101 | 123  | 146  | 168  | 181  |

| DISTANCE<br>MILES | NE       | ENE     | E       | ESE     | SE      | SSE     | S        | SSW      | SW       | WSW     | W        | WNW     | WW      | NNW     | N       |
|-------------------|----------|---------|---------|---------|---------|---------|----------|----------|----------|---------|----------|---------|---------|---------|---------|
| 4                 | 1.4E-07* | 1.3E-07 | 1.3E-07 | 1.3E-07 | 2.4E-06 | 2.2E-06 | 7.9E-07  | 9.8E-07  | 1.8E-06  | 1.8E-06 | 1.8E-06  | 2.4E-06 | 2.0E-06 | 2.0E-06 | 1.3E-07 |
| 4.2               | 1E-07    | 1.8E-07 | 1.8E-07 | 1.8E-07 | 2.8E-06 | 2.8E-06 | 1.0E-06  | 1.5E-06  | 1.8E-06  | 1.8E-06 | 2.1E-06  | 2.1E-06 | 2.3E-06 | 2.3E-06 | 1.8E-07 |
| 4.2               | 1E-07    | 2.6E-07 | 2.6E-07 | 2.6E-07 | 3.1E-06 | 3.1E-06 | 1.7E-06  | 1.7E-06  | 2.0E-06  | 2.0E-06 | 2.4E-06  | 2.4E-06 | 2.6E-06 | 2.6E-06 | 2.6E-07 |
| 5                 | 8E-07    | 5.5E-07 | 5.5E-07 | 5.5E-07 | 3.9E-06 | 3.9E-06 | 3.4E-06  | 2.8E-06* | 3.0E-06  | 3.0E-06 | 3.2E-06  | 3.2E-06 | 3.4E-06 | 3.4E-06 | 5.5E-07 |
| 5                 | 8E-07    | 6.5E-07 | 6.5E-07 | 6.5E-07 | 4.1E-06 | 4.1E-06 | 3.9E-06  | 3.0E-06  | 3.2E-06  | 3.2E-06 | 3.4E-06  | 3.4E-06 | 3.6E-06 | 3.6E-06 | 6.5E-07 |
| 5                 | 1E-06    | 7.7E-07 | 7.7E-07 | 7.7E-07 | 4.3E-06 | 4.3E-06 | 4.3E-06  | 3.2E-06  | 3.6E-06* | 3.6E-06 | 3.6E-06  | 4.3E-06 | 4.3E-06 | 4.3E-06 | 7.7E-07 |
| 5                 | 1E-06    | 1.0E-06 | 1.0E-06 | 1.0E-06 | 4.7E-06 | 4.7E-06 | 4.9E-06  | 4.9E-06  | 4.3E-06* | 4.3E-06 | 4.3E-06  | 4.9E-06 | 4.9E-06 | 4.9E-06 | 1.0E-06 |
| 6                 | 1.4E-06  | 1.3E-06 | 1.3E-06 | 1.3E-06 | 4.9E-06 | 4.9E-06 | 5.3E-06* | 4.1E-06  | 4.9E-06  | 4.9E-06 | 4.1E-06* | 4.9E-06 | 4.9E-06 | 4.9E-06 | 1.3E-06 |
| 6                 | 1.4E-06  | 1.6E-06 | 1.6E-06 | 1.6E-06 | 4.9E-06 | 4.9E-06 | 5.2E-06* | 4.6E-06  | 4.9E-06  | 4.9E-06 | 4.3E-06  | 4.9E-06 | 4.9E-06 | 4.9E-06 | 1.6E-06 |
| 7                 | 1.8E-06  | 1.7E-06 | 1.7E-06 | 1.7E-06 | 4.9E-06 | 4.9E-06 | 5.5E-06  | 4.6E-06  | 4.9E-06  | 4.9E-06 | 4.9E-06  | 4.9E-06 | 4.9E-06 | 4.9E-06 | 1.8E-06 |
| 7                 | 1.8E-06  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 4.9E-06 | 4.9E-06 | 5.5E-06  | 4.6E-06  | 4.9E-06  | 4.9E-06 | 4.9E-06  | 4.9E-06 | 4.9E-06 | 4.9E-06 | 1.8E-06 |
| 1.0               | 2.3E-06  | 2.3E-06 | 2.3E-06 | 2.3E-06 | 4.0E-06 | 4.0E-06 | 4.0E-06  | 4.0E-06  | 4.0E-06  | 4.0E-06 | 4.0E-06  | 4.0E-06 | 4.0E-06 | 4.0E-06 | 2.0E-06 |
| 1.5               | 1.8E-06  | 2.2E-06 | 1.8E-06 | 1.8E-06 | 2.4E-06 | 2.4E-06 | 2.5E-06  | 2.5E-06  | 2.5E-06  | 2.5E-06 | 2.5E-06  | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.4E-06 |
| 2.0               | 1.6E-06  | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06  | 1.7E-06  | 1.6E-06  | 1.6E-06 | 1.6E-06  | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 |
| 2.5               | 1.2E-06  | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06  | 1.2E-06  | 1.1E-06  | 1.1E-06 | 1.1E-06  | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 |
| 3.0               | 8.7E-07  | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07  | 8.5E-07  | 8.5E-07  | 8.5E-07 | 8.5E-07  | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 |
| 3.5               | 4.7E-07  | 6.7E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07  | 6.7E-07  | 6.6E-07  | 6.6E-07 | 6.7E-07  | 6.7E-07 | 6.7E-07 | 6.7E-07 | 6.7E-07 |
| 4.0               | 5.4E-07  | 5.4E-07 | 5.3E-07 | 5.3E-07 | 5.3E-07 | 5.3E-07 | 5.3E-07  | 5.3E-07  | 5.3E-07  | 5.3E-07 | 5.3E-07  | 5.3E-07 | 5.3E-07 | 5.3E-07 | 5.3E-07 |
| 4.5               | 4.4E-07  | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07  | 4.4E-07  | 4.4E-07  | 4.4E-07 | 4.4E-07  | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 |
| 5.0               | 3.7E-07  | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07  | 3.7E-07  | 3.7E-07  | 3.7E-07 | 3.7E-07  | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 |
| 6.0               | 2.7E-07  | 2.7E-07 | 2.7E-07 | 2.7E-07 | 2.7E-07 | 2.7E-07 | 2.7E-07  | 2.7E-07  | 2.7E-07  | 2.7E-07 | 2.7E-07  | 2.7E-07 | 2.7E-07 | 2.7E-07 | 2.7E-07 |
| 7.0               | 2.1E-07  | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07  | 2.1E-07  | 2.1E-07  | 2.1E-07 | 2.1E-07  | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 |
| 8.0               | 1.7E-07  | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07  | 1.7E-07  | 1.7E-07  | 1.7E-07 | 1.7E-07  | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 |
| 9.0               | 1.4E-07  | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07  | 1.4E-07  | 1.4E-07  | 1.4E-07 | 1.4E-07  | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 |
| 10.0              | 1.1E-07  | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07  | 1.1E-07  | 1.1E-07  | 1.1E-07 | 1.1E-07  | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 |
| 15.0              | 5.7E-08  | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08  | 5.7E-08  | 5.7E-08  | 5.7E-08 | 5.7E-08  | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 |
| 20.0              | 3.5E-08  | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08  | 3.5E-08  | 3.5E-08  | 3.5E-08 | 3.5E-08  | 3.5E-08 | 3.5E-08 | 3.5E-08 | 3.5E-08 |
| 25.0              | 2.4E-08  | 2.4E-08 | 2.4E-08 | 2.4E-08 | 2.4E-08 | 2.4E-08 | 2.4E-08  | 2.4E-08  | 2.4E-08  | 2.4E-08 | 2.4E-08  | 2.4E-08 | 2.4E-08 | 2.4E-08 | 2.4E-08 |
| 30.0              | 1.7E-08  | 1.7E-08 | 1.7E-08 | 1.7E-08 | 1.7E-08 | 1.7E-08 | 1.7E-08  | 1.7E-08  | 1.7E-08  | 1.7E-08 | 1.7E-08  | 1.7E-08 | 1.7E-08 | 1.7E-08 | 1.7E-08 |
| 40.0              | 1.0E-08  | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08  | 1.0E-08  | 1.0E-08  | 1.0E-08 | 1.0E-08  | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| 50.0              | 7.2E-09  | 7.2E-09 | 7.2E-09 | 7.2E-09 | 7.2E-09 | 7.2E-09 | 7.2E-09  | 7.2E-09  | 7.2E-09  | 7.2E-09 | 7.2E-09  | 7.2E-09 | 7.2E-09 | 7.2E-09 | 7.2E-09 |

|     |          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|-----|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MAX | CONC     | 2.3E-06 | 2.3E-06 | 2.3E-06 | 4.9E-06 | 5.3E-06 | 5.5E-06 | 5.6E-06 | 5.1E-06 | 4.8E-06 | 4.8E-06 | 5.0E-06 | 4.4E-06 | 4.4E-06 | 2.4E-06 |
|     | DIST(MI) | 1.0     | 1.0     | 1.0     | 1.0     | .6      | .7      | .7      | .6      | .7      | .7      | .6      | .7      | .7      | 1.0     |

TABLE NO. 00-25

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
STACK RELEASE HIGH FLOW  
STABILITY UNSTABLE  
SPEED 8. MPH

| DISTANCE<br>MILES | WIND DIRECTION RANGES |         |         |         |         |         |         |         |         |         | DOWN WIND SECTOR BEARING |         |         |         |         |         |  |  |  |  |
|-------------------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------------------|---------|---------|---------|---------|---------|--|--|--|--|
|                   | 192-213               | 214-236 | 237-288 | 289-281 | 282-303 | 304-326 | 327-348 | 349-11  | 12-33   | 34-56   | 57-76                    | 78-101  | 102-123 | 124-146 | 147-168 | 169-181 |  |  |  |  |
| 0.4               | 2.8E-07               | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07                  | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 |  |  |  |  |
| 0.4               | 3.4E-07               | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07                  | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 |  |  |  |  |
| 0.4               | 4.3E-07               | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07                  | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 |  |  |  |  |
| 0.5               | 7.3E-07               | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07                  | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 |  |  |  |  |
| 0.5               | 8.3E-07               | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07                  | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 |  |  |  |  |
| 0.5               | 9.3E-07               | 9.3E-07 | 9.3E-07 | 9.3E-07 | 9.3E-07 | 9.3E-07 | 9.3E-07 | 9.3E-07 | 9.3E-07 | 9.3E-07 | 9.3E-07                  | 9.3E-07 | 9.3E-07 | 9.3E-07 | 9.3E-07 | 9.3E-07 |  |  |  |  |
| 0.6               | 1.2E-06               | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06                  | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 |  |  |  |  |
| 0.6               | 1.4E-06               | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06                  | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 |  |  |  |  |
| 0.7               | 1.6E-06               | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06                  | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 |  |  |  |  |
| 0.7               | 1.6E-06               | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06                  | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 |  |  |  |  |
| 1.0               | 1.7E-06               | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06                  | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 |  |  |  |  |
| 1.5               | 1.2E-06               | 1.4E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06                  | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 |  |  |  |  |
| 2.0               | 9.8E-07               | 1.0E-06 | 8.6E-07 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06                  | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 |  |  |  |  |
| 2.5               | 7.0E-07               | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07                  | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 |  |  |  |  |
| 3.0               | 5.3E-07               | 5.2E-07 | 5.2E-07 | 5.2E-07 | 5.2E-07 | 5.2E-07 | 5.2E-07 | 5.2E-07 | 5.2E-07 | 5.2E-07 | 5.2E-07                  | 5.2E-07 | 5.2E-07 | 5.2E-07 | 5.2E-07 | 5.2E-07 |  |  |  |  |
| 3.5               | 4.1E-07               | 4.0E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07                  | 4.0E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07 |  |  |  |  |
| 4.0               | 3.2E-07               | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07                  | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 | 3.2E-07 |  |  |  |  |
| 4.5               | 2.7E-07               | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07                  | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 |  |  |  |  |
| 5.0               | 2.2E-07               | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07                  | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 |  |  |  |  |
| 6.0               | 1.6E-07               | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07                  | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 |  |  |  |  |
| 7.0               | 1.3E-07               | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07                  | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 |  |  |  |  |
| 8.0               | 1.0E-07               | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07                  | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 |  |  |  |  |
| 9.0               | 8.2E-08               | 8.2E-08 | 8.1E-08 | 8.1E-08 | 8.1E-08 | 8.1E-08 | 8.1E-08 | 8.1E-08 | 8.1E-08 | 8.1E-08 | 8.1E-08                  | 8.1E-08 | 8.1E-08 | 8.1E-08 | 8.1E-08 | 8.1E-08 |  |  |  |  |
| 10.0              | 6.8E-08               | 6.8E-08 | 6.8E-08 | 6.8E-08 | 6.8E-08 | 6.8E-08 | 6.8E-08 | 6.8E-08 | 6.8E-08 | 6.8E-08 | 6.8E-08                  | 6.8E-08 | 6.8E-08 | 6.8E-08 | 6.8E-08 | 6.8E-08 |  |  |  |  |
| 15.0              | 3.4E-08               | 3.4E-08 | 3.4E-08 | 3.4E-08 | 3.4E-08 | 3.4E-08 | 3.4E-08 | 3.4E-08 | 3.4E-08 | 3.4E-08 | 3.4E-08                  | 3.4E-08 | 3.4E-08 | 3.4E-08 | 3.4E-08 | 3.4E-08 |  |  |  |  |
| 20.0              | 2.1E-08               | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08                  | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 |  |  |  |  |
| 25.0              | 1.4E-08               | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08                  | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 |  |  |  |  |
| 30.0              | 1.0E-08               | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08                  | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |  |  |  |  |
| 40.0              | 6.3E-09               | 6.3E-09 | 6.3E-09 | 6.3E-09 | 6.3E-09 | 6.3E-09 | 6.3E-09 | 6.3E-09 | 6.3E-09 | 6.3E-09 | 6.3E-09                  | 6.3E-09 | 6.3E-09 | 6.3E-09 | 6.3E-09 | 6.3E-09 |  |  |  |  |
| 50.0              | 4.3E-09               | 4.3E-09 | 4.3E-09 | 4.3E-09 | 4.3E-09 | 4.3E-09 | 4.3E-09 | 4.3E-09 | 4.3E-09 | 4.3E-09 | 4.3E-09                  | 4.3E-09 | 4.3E-09 | 4.3E-09 | 4.3E-09 | 4.3E-09 |  |  |  |  |

MAX  
CONC 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06 1.7E-06  
DIST(MI) 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

TABLE NO. 00-26

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
STACK RELEASE HIGH FLOW  
STABILITY STABLE  
SPEED 1. MPH

| WIND DIRECTION RANGES   | 74- | 79- | 102- | 124- | 147- | 168- |
|---|-----|-----|------|------|------|------|
| 192- 214- 237- 259- 282- 304T 327- 349- 372- 394- 416- 438- 460- 482- 504- 526- 548- 570- 592- 614- 636- 658- 680- 702- 724- 746- 768- 790- 812- 834- 856- 878- 900- 922- 944- 966- 988- 1010- 1032- 1054- 1076- 1098- 1120- 1142- 1164- 1186- 1208- 1230- 1252- 1274- 1296- 1318- 1340- 1362- 1384- 1406- 1428- 1450- 1472- 1494- 1516- 1538- 1560- 1582- 1604- 1626- 1648- 1670- 1692- 1714- 1736- 1758- 1780- 1802- 1824- 1846- 1868- 1890- 1912- 1934- 1956- 1978- 2000- 2022- 2044- 2066- 2088- 2110- 2132- 2154- 2176- 2198- 2220- 2242- 2264- 2286- 2308- 2330- 2352- 2374- 2396- 2418- 2440- 2462- 2484- 2506- 2528- 2550- 2572- 2594- 2616- 2638- 2660- 2682- 2704- 2726- 2748- 2770- 2792- 2814- 2836- 2858- 2880- 2902- 2924- 2946- 2968- 2990- 3012- 3034- 3056- 3078- 3100- 3122- 3144- 3166- 3188- 3210- 3232- 3254- 3276- 3298- 3320- 3342- 3364- 3386- 3408- 3430- 3452- 3474- 3496- 3518- 3540- 3562- 3584- 3606- 3628- 3650- 3672- 3694- 3716- 3738- 3760- 3782- 3804- 3826- 3848- 3870- 3892- 3914- 3936- 3958- 3980- 4002- 4024- 4046- 4068- 4090- 4112- 4134- 4156- 4178- 4200- 4222- 4244- 4266- 4288- 4310- 4332- 4354- 4376- 4398- 4420- 4442- 4464- 4486- 4508- 4530- 4552- 4574- 4596- 4618- 4640- 4662- 4684- 4706- 4728- 4750- 4772- 4794- 4816- 4838- 4860- 4882- 4904- 4926- 4948- 4970- 4992- 5014- 5036- 5058- 5080- 5102- 5124- 5146- 5168- 5190- 5212- 5234- 5256- 5278- 5300- 5322- 5344- 5366- 5388- 5410- 5432- 5454- 5476- 5498- 5520- 5542- 5564- 5586- 5608- 5630- 5652- 5674- 5696- 5718- 5740- 5762- 5784- 5806- 5828- 5850- 5872- 5894- 5916- 5938- 5960- 5982- 6004- 6026- 6048- 6070- 6092- 6114- 6136- 6158- 6180- 6202- 6224- 6246- 6268- 6290- 6312- 6334- 6356- 6378- 6400- 6422- 6444- 6466- 6488- 6510- 6532- 6554- 6576- 6598- 6620- 6642- 6664- 6686- 6708- 6730- 6752- 6774- 6796- 6818- 6840- 6862- 6884- 6906- 6928- 6950- 6972- 6994- 7016- 7038- 7060- 7082- 7104- 7126- 7148- 7170- 7192- 7214- 7236- 7258- 7280- 7302- 7324- 7346- 7368- 7390- 7412- 7434- 7456- 7478- 7500- 7522- 7544- 7566- 7588- 7610- 7632- 7654- 7676- 7698- 7720- 7742- 7764- 7786- 7808- 7830- 7852- 7874- 7896- 7918- 7940- 7962- 7984- 8006- 8028- 8050- 8072- 8094- 8116- 8138- 8160- 8182- 8204- 8226- 8248- 8270- 8292- 8314- 8336- 8358- 8380- 8402- 8424- 8446- 8468- 8490- 8512- 8534- 8556- 8578- 8600- 8622- 8644- 8666- 8688- 8710- 8732- 8754- 8776- 8798- 8820- 8842- 8864- 8886- 8908- 8930- 8952- 8974- 8996- 9018- 9040- 9062- 9084- 9106- 9128- 9150- 9172- 9194- 9216- 9238- 9260- 9282- 9304- 9326- 9348- 9370- 9392- 9414- 9436- 9458- 9480- 9502- 9524- 9546- 9568- 9590- 9612- 9634- 9656- 9678- 9700- 9722- 9744- 9766- 9788- 9810- 9832- 9854- 9876- 9898- 9920- 9942- 9964- 9986- 10008- 10030- 10052- 10074- 10096- 10118- 10140- 10162- 10184- 10206- 10228- 10250- 10272- 10294- 10316- 10338- 10360- 10382- 10404- 10426- 10448- 10470- 10492- 10514- 10536- 10558- 10580- 10602- 10624- 10646- 10668- 10690- 10712- 10734- 10756- 10778- 10800- 10822- 10844- 10866- 10888- 10910- 10932- 10954- 10976- 10998- 11020- 11042- 11064- 11086- 11108- 11130- 11152- 11174- 11196- 11218- 11240- 11262- 11284- 11306- 11328- 11350- 11372- 11394- 11416- 11438- 11460- 11482- 11504- 11526- 11548- 11570- 11592- 11614- 11636- 11658- 11680- 11702- 11724- 11746- 11768- 11790- 11812- 11834- 11856- 11878- 11900- 11922- 11944- 11966- 11988- 12010- 12032- 12054- 12076- 12098- 12120- 12142- 12164- 12186- 12208- 12230- 12252- 12274- 12296- 12318- 12340- 12362- 12384- 12406- 12428- 12450- 12472- 12494- 12516- 12538- 12560- 12582- 12604- 12626- 12648- 12670- 12692- 12714- 12736- 12758- 12780- 12802- 12824- 12846- 12868- 12890- 12912- 12934- 12956- 12978- 12998- 13020- 13042- 13064- 13086- 13108- 13130- 13152- 13174- 13196- 13218- 13240- 13262- 13284- 13306- 13328- 13350- 13372- 13394- 13416- 13438- 13460- 13482- 13504- 13526- 13548- 13570- 13592- 13614- 13636- 13658- 13680- 13702- 13724- 13746- 13768- 13790- 13812- 13834- 13856- 13878- 13900- 13922- 13944- 13966- 13988- 14010- 14032- 14054- 14076- 14098- 14120- 14142- 14164- 14186- 14208- 14230- 14252- 14274- 14296- 14318- 14340- 14362- 14384- 14406- 14428- 14450- 14472- 14494- 14516- 14538- 14560- 14582- 14604- 14626- 14648- 14670- 14692- 14714- 14736- 14758- 14780- 14802- 14824- 14846- 14868- 14890- 14912- 14934- 14956- 14978- 14998- 15020- 15042- 15064- 15086- 15108- 15130- 15152- 15174- 15196- 15218- 15240- 15262- 15284- 15306- 15328- 15350- 15372- 15394- 15416- 15438- 15460- 15482- 15504- 15526- 15548- 15570- 15592- 15614- 15636- 15658- 15680- 15702- 15724- 15746- 15768- 15790- 15812- 15834- 15856- 15878- 15900- 15922- 15944- 15966- 15988- 16010- 16032- 16054- 16076- 16098- 16120- 16142- 16164- 16186- 16208- 16230- 16252- 16274- 16296- 16318- 16340- 16362- 16384- 16406- 16428- 16450- 16472- 16494- 16516- 16538- 16560- 16582- 16604- 16626- 16648- 16670- 16692- 16714- 16736- 16758- 16780- 16802- 16824- 16846- 16868- 16890- 16912- 16934- 16956- 16978- 16998- 17020- 17042- 17064- 17086- 17108- 17130- 17152- 17174- 17196- 17218- 17240- 17262- 17284- 17306- 17328- 17350- 17372- 17394- 17416- 17438- 17460- 17482- 17504- 17526- 17548- 17570- 17592- 17614- 17636- 17658- 17680- 17702- 17724- 17746- 17768- 17790- 17812- 17834- 17856- 17878- 17900- 17922- 17944- 17966- 17988- 18010- 18032- 18054- 18076- 18098- 18120- 18142- 18164- 18186- 18208- 18230- 18252- 18274- 18296- 18318- 18340- 18362- 18384- 18406- 18428- 18450- 18472- 18494- 18516- 18538- 18560- 18582- 18604- 18626- 18648- 18670- 18692- 18714- 18736- 18758- 18780- 18802- 18824- 18846- 18868- 18890- 18912- 18934- 18956- 18978- 18998- 19020- 19042- 19064- 19086- 19108- 19130- 19152- 19174- 19196- 19218- 19240- 19262- 19284- 19306- 19328- 19350- 19372- 19394- 19416- 19438- 19460- 19482- 19504- 19526- 19548- 19570- 19592- 19614- 19636- 19658- 19680- 19702- 19724- 19746- 19768- 19790- 19812- 19834- 19856- 19878- 19900- 19922- 19944- 19966- 19988- 20010- 20032- 20054- 20076- 20098- 20120- 20142- 20164- 20186- 20208- 20230- 20252- 20274- 20296- 20318- 20340- 20362- 20384- 20406- 20428- 20450- 20472- 20494- 20516- 20538- 20560- 20582- 20604- 20626- 20648- 20670- 20692- 20714- 20736- 20758- 20780- 20802- 20824- 20846- 20868- 20890- 20912- 20934- 20956- 20978- 20998- 21020- 21042- 21064- 21086- 21108- 21130- 21152- 21174- 21196- 21218- 21240- 21262- 21284- 21306- 21328- 21350- 21372- 21394- 21416- 21438- 21460- 21482- 21504- 21526- 21548- 21570- 21592- 21614- 21636- 21658- 21680- 21702- 21724- 21746- 21768- 21790- 21812- 21834- 21856- 21878- 21900- 21922- 21944- 21966- 21988- 22010- 22032- 22054- 22076- 22098- 22120- 22142- 22164- 22186- 22208- 22230- 22252- 22274- 22296- 22318- 22340- 22362- 22384- 22406- 22428- 22450- 22472- 22494- 22516- 22538- 22560- 22582- 22604- 22626- 22648- 22670- 22692- 22714- 22736- 22758- 22780- 22802- 22824- 22846- 22868- 22890- 22912- 22934- 22956- 22978- 22998- 23020- 23042- 23064- 23086- 23108- 23130- 23152- 23174- 23196- 23218- 23240- 23262- 23284- 23306- 23328- 23350- 23372- 23394- 23416- 23438- 23460- 23482- 23504- 23526- 23548- 23570- 23592- 23614- 23636- 23658- 23680- 23702- 23724- 23746- 23768- 23790- 23812- 23834- 23856- 23878- 23900- 23922- 23944- 23966- 23988- 24010- 24032- 24054- 24076- 24098- 24120- 24142- 24164- 24186- 24208- 24230- 24252- 24274- 24296- 24318- 24340- 24362- 24384- 24406- 24428- 24450- 24472- 24494- 24516- 24538- 24560- 24582- 24604- 24626- 24648- 24670- 24692- 24714- 24736- 24758- 24780- 24802- 24824- 24846- 24868- 24890- 24912- 24934- 24956- 24978- 24998- 25020- 25042- 25064- 25086- 25108- 25130- 25152- 25174- 25196- 25218- 25240- 25262- 25284- 25306- 25328- 25350- 25372- 25394- 25416- 25438- 25460- 25482- 25504- 25526- 25548- 25570- 25592- 25614- 25636- 25658- 25680- 25702- 25724- 25746- 25768- 25790- 25812- 25834- 25856- 25878- 25900- 25922- 25944- 25966- 25988- 26010- 26032- 26054- 26076- 26098- 26120- 26142- 26164- 26186- 26208- 26230- 26252- 26274- 26296- 26318- 26340- 26362- 26384- 26406- 26428- 26450- 26472- 26494- 26516- 26538- 26560- 26582- 26604- 26626- 26648- 26670- 26692- 26714- 26736- 26758- 26780- 26802- 26824- 26846- 26868- 26890- 26912- 26934- 26956- 26978- 26998- 27020- 27042- 27064- 27086- 27108- 27130- 27152- 27174- 27196- 27218- 27240- 27262- 27284- 27306- 27328- 27350- 27372- 27394- 27416- 27438- 27460- 27482- 27504- 27526- 27548- 27570- 27592- 27614- 27636- 27658- 27680- 27702- 27724- 27746- 27768- 27790- 27812- 27834- 27856- 27878- 27900- 27922- 27944- 27966- 27988- 28010- 28032- 28054- 28076- 28098- 28120- 28142- 28164- 28186- 28208- 28230- 28252- 28274- 28296- 28318- 28340- 28362- 28384- 28406- 28428- 28450- 28472- 28494- 28516- 28538- 28560- 28582- 28604- 28626- 28648- 28670- 28692- 28714- 28736- 28758- 28780- 28802- 28824- 28846- 28868- 28890- 28912- 28934- 28956- 28978- 28998- 29020- 29042- 29064- 29086- 29108- 29130- 29152- 29174- 29196- 29218- 29240- 29262- 29284- 29306- 29328- 29350- 29372- 29394- 29416- 29438- 29460- 29482- 29504- 29526- 29548- 29570- 29592- 29614- 29636- 29658- 29680- 29702- 29724- 29746- 29768- 29790- 29812- 29834- 29856- 29878- 29900- 29922- 29944- 29966- 29988- 30010- 30032- 30054- 30076- 30098- 30120- 30142- 30164- 30186- 30208- 30230- 30252- 30274- 30296- 30318- 30340- 30362- 30384- 30406- 30428- 30450- 30472- 30494- 30516- 30538- 30560- 30582- 30604- 30626- 30648- 30670- 30692- 30714- 30736- 30758- 30780- 30802- 30824- 30846- 30868- 30890- 30912- 30934- 30956- 30978- 30998- 31020- 31042- 31064- 31086- 31108- 31130- 31152- 31174- 31196- 31218- 31240- 31262- 31284- 31306- 31328- 31350- 31372- 31394- 31416- 31438- 31460- 31482- 31504- 31526- 31548- 31570- 31592- 31614- 31636- 31658- 31680- 31702- 31724- 31746- 31768- 31790- 31812- 31834- 31856- 31878- 31900- 31922- 31944- 31966- 31988- 32010- 32032- 32054- 32076- 32098- 32120- 32142- 32164- 32186- 32208- 32230- 32252- 32274- 32296- 32318- 32340- 32362- 32384- 32406- 32428- 32450- 32472- 32494- 32516- 32538- 32560- 32582- 32604- 32626- 32648- 32670- 32692- 32714- 32736- 32758- 32780- 32802- 32824- 32846- 32868- 32890- 32912- 32934- 32956- 32978- 32998- 33020- 33042- 33064- 33086- 33108- 33130- 33152- 33174- 33196- 33218- 33240- 33262- 33284- 33306- 33328- 33350- 33372- 33394- 33416- 33438- 33460- 33482- 33504- 33526- 33548- 33570- 33592- 33614- 33636- 33658- 33680- 33702- 33724- 33746- 33768- 33790- 33812- 33834- 33856- 33878- 33900- 33922- 33944- 33966- 33988- 34010- 34032- 34054- 34076- 34098- 34120- 34142- 34164- 34186- 34208- 34230- 34252- 34274- 34296- 34318- 34340- 34362- 34384- 34406- 34428- 34450- 34472- 34494- 34516- 34538- 34560- 34582- 34604- 34626- 34648- 34670- 34692- 34714- 34736- 34758- 34780- 34802- 34824- 34846- 34868- 34890- 34912- 34934- 34956- 34978- 34998- 35020- 35042- 35064- 35086- 35108- 35130- 35152- 35174- 35196- 35218- 35240- 35262- 35284- 35306- 35328- 35350- 35372- 35394- 35416- 35438- 35460- 35482- 35504- 35526- 35548- 35570- 35592- 35614- 35636- 35658- 35680- 35702- 35724- 35746- 35768- 35790- 35812- 35834- 35856- 35878- 35900- 35922- 35944- 35966- 35988- 36010- 36032- 36054- 36076- 36098- 36120- 36142- 36164- 36186- 36208- 36230- 36252- 36274- 36296- 36318- 36340- 36362- 36384- 36406- 36428- 36450- 36472- 36494- 36516- 36538- 36560- 36582- 36604- 36626- 36648- 36670- 36692- 36714- 36736- 36758- 36780- 36802- 36824- 36846- 36868- 36890- 36912- 36934- 36956- 36978- 36998- 37020- 37042- 37064- 37086- 37108- 37130- 37152- 37174- 37196- 37218- 37240- 37262- 37284- 37306- 37328- 37350- 37372- 37394- 37416- 37438- 37460- 37482- 37504- 37526- 37548- 37570- 37592- 37614- 37636- 37658- 37680- 37702- 37724- 37746- 37768- 37790- 37812- 37834- 37856- 37878- 37900- 37922- 37944- 37966- 37988- 38010- 38032- 38054- 38076- 38098- 38120- 38142- 38164- 38186- 38208- 38230- 38252- 38274- 38296- 38318- 38340- 38362- 38384- 38406- 38428- 38450- 38472- 38494- 38516- 38538- 38560- 38582- 38604- 38626- 38648- 38670- 38692- 38714- 38736- 38758- 38780- 38802- 38824- 38846- 38868- 38890- 38912- 38934- 38956- 38978- 38998- 39020- 39042- 39064- 39086- 39108- 39130- 39152- 39174- 39196- 39218- 39240- 39262- 39284- 39306- 39328- 39350- 39372- 39394- 39416- 39438- 39460- 39482- 39504- 39526- 39548- 3 |     |     |      |      |      |      |











PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
STACK RELEASE NORMAL FLOW  
STABILITY UNSTABLE  
SPEED 3 MPH

|      |      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192- | 214- | 237- | 259- | 282- | 304- | 327- | 349- | 12- | 33- | 57- | 79- | 103- | 124- | 147- | 169- |
| 213  | 236  | 268  | 281  | 303  | 326  | 348  | 371  | 393 | 415 | 437 | 459 | 481  | 503  | 525  | 547  |

WIND DIRECTION RANGES  
DOWN WIND WIND SECTOR BEARING

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4                 | 3.9E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 4.8E-06 | 4.8E-06 | 1.8E-06 | 2.2E-06 | 3.1E-06 | 3.7E-06 | 3.7E-06 | 4.2E-06 | 4.2E-06 | 4.0E-06 | 3.6E-07 |
| 5                 | 4.9E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07 | 5.2E-06 | 5.2E-06 | 2.1E-06 | 3.0E-06 | 3.9E-06 | 4.1E-06 | 4.1E-06 | 4.1E-06 | 4.1E-06 | 4.1E-06 | 4.8E-07 |
| 6                 | 6.2E-07 | 6.2E-07 | 6.2E-07 | 6.2E-07 | 6.2E-07 | 6.2E-06 | 6.2E-06 | 3.2E-06 | 4.1E-06 | 5.0E-06 | 5.2E-06 | 5.2E-06 | 5.2E-06 | 5.2E-06 | 5.2E-06 | 6.2E-07 |
| 7                 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 5.9E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 1.1E-06 |
| 8                 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 1.2E-06 |
| 9                 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 1.4E-06 |
| 10                | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 1.7E-06 |
| 11                | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 2.1E-06 |
| 12                | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 2.4E-06 |
| 13                | 2.8E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 2.8E-06 |
| 14                | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 2.7E-06 |
| 15                | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.0E-06 |
| 16                | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.8E-06 |
| 17                | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 |
| 18                | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 |
| 19                | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 |
| 20                | 5.1E-07 | 5.1E-07 | 5.1E-07 | 5.1E-07 | 5.1E-07 | 5.1E-07 | 5.1E-07 | 4.1E-07 | 4.1E-07 | 4.1E-07 | 4.1E-07 | 4.1E-07 | 4.1E-07 | 4.1E-07 | 4.1E-07 | 5.1E-07 |
| 21                | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 |
| 22                | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 |
| 23                | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 |
| 24                | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 |
| 25                | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 |
| 26                | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 |
| 27                | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 | 4.9E-08 |
| 28                | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 |
| 29                | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 |
| 30                | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 |
| 40                | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 |
| 50                | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 |

|     |          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|-----|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MAX | CONC     | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 7.0E-06 | 6.9E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 2.8E-06 |
|     | DIST(MI) | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00- 2

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
STACK RELEASE NORMAL FLOW  
STABILITY UNSTABLE  
SPEED 8. MPH

| DISTANCE<br>MILES | WIND DIRECTION RANGES    |             |             |             |             |             |             |            |           |           |           |            |             |             |             |             |         |
|-------------------|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-----------|-----------|-----------|------------|-------------|-------------|-------------|-------------|---------|
|                   | 192-<br>213              | 214-<br>236 | 237-<br>288 | 289-<br>281 | 282-<br>303 | 304-<br>326 | 327-<br>348 | 349-<br>11 | 12-<br>33 | 34-<br>88 | 87-<br>78 | 79-<br>101 | 102-<br>123 | 124-<br>146 | 147-<br>168 | 169-<br>191 |         |
|                   | DOWN WIND SECTOR BEARING |             |             |             |             |             |             |            |           |           |           |            |             |             |             |             |         |
|                   | NNE                      | NE          | ENE         | E           | ESE         | SE          | SSE         | S          | SSW       | SW        | WSW       | W          | WNW         | NW          | NNW         | N           |         |
| .4                | 4.3E-07*                 | 4.0E-07*    | 4.0E-07     | 4.0E-07     | 4.0E-07     | 4.3E-06     | 4.0E-06     | 1.8E-06    | 2.1E-06   | 2.9E-06   | 2.8E-06   | 3.4E-06    | 3.4E-06     | 4.3E-06     | 3.7E-06     | 4.0E-07     |         |
| .4                | 5.5E-07                  | 5.2E-07     | 5.2E-07*    | 5.2E-07     | 5.2E-07     | 4.8E-06     | 4.5E-06     | 2.0E-06    | 2.8E-06   | 3.2E-06   | 3.2E-06   | 3.6E-06    | 3.6E-06     | 4.5E-06     | 3.9E-06     | 5.2E-07     |         |
| .4                | 6.7E-07                  | 6.3E-07     | 6.3E-07     | 6.3E-07     | 6.3E-07     | 4.7E-06     | 4.7E-06     | 2.2E-06    | 3.0E-06   | 3.4E-06   | 3.4E-06   | 3.8E-06    | 3.8E-06     | 4.7E-06     | 4.1E-06*    | 6.3E-07     |         |
| .5                | 1.0E-06                  | 9.9E-07     | 9.9E-07     | 9.9E-07     | 9.9E-07     | 4.9E-06     | 4.9E-06     | 4.4E-06    | 3.8E-06*  | 3.9E-06   | 3.9E-06   | 4.2E-06    | 4.2E-06     | 4.9E-06     | 4.4E-06     | 1.1E-06     |         |
| .5                | 1.2E-06                  | 1.1E-06     | 1.1E-06     | 1.1E-06*    | 1.1E-06     | 4.9E-06     | 4.9E-06     | 4.7E-06    | 3.8E-06   | 4.2E-06*  | 3.8E-06   | 4.2E-06    | 4.2E-06     | 4.8E-06     | 4.4E-06     | 1.4E-06     |         |
| .5                | 1.3E-06                  | 1.2E-06     | 1.2E-06     | 1.2E-06     | 1.2E-06     | 4.8E-06     | 4.8E-06     | 5.1E-06    | 5.1E-06   | 4.0E-06   | 4.6E-06   | 4.8E-06    | 4.7E-06     | 4.1E-06*    | 4.4E-06     | 1.6E-06     |         |
| .5                | 1.5E-06                  | 1.4E-06     | 1.4E-06     | 1.4E-06     | 1.4E-06     | 4.9E-06     | 4.9E-06     | 5.1E-06    | 5.1E-06   | 4.0E-06   | 4.6E-06   | 4.8E-06    | 4.7E-06     | 4.1E-06*    | 4.4E-06     | 1.6E-06     |         |
| .6                | 1.7E-06                  | 1.6E-06     | 1.6E-06     | 1.6E-06     | 1.6E-06     | 4.7E-06     | 4.8E-06     | 4.9E-06    | 4.9E-06*  | 4.1E-06   | 4.7E-06   | 4.8E-06    | 3.9E-06     | 4.4E-06     | 4.3E-06     | 2.0E-06     |         |
| .6                | 1.8E-06                  | 1.8E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06     | 4.4E-06     | 4.6E-06*    | 4.5E-06    | 4.7E-06   | 4.1E-06   | 4.3E-06   | 4.4E-06    | 4.8E-06     | 4.1E-06     | 3.9E-06     | 2.1E-06     |         |
| .7                | 1.9E-06                  | 1.8E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06     | 4.3E-06     | 4.5E-06*    | 4.5E-06    | 4.7E-06   | 4.1E-06   | 4.3E-06   | 4.4E-06    | 4.8E-06     | 4.1E-06     | 3.9E-06     | 1.9E-06     |         |
| .7                | 1.9E-06                  | 1.8E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06     | 4.2E-06     | 4.4E-06     | 4.5E-06    | 4.6E-06   | 4.4E-06   | 4.3E-06   | 4.4E-06    | 4.8E-06     | 4.1E-06     | 3.9E-06     | 1.9E-06     |         |
| 1.0               | 1.8E-06                  | 1.8E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06     | 2.9E-06     | 2.9E-06     | 2.9E-06    | 2.9E-06   | 1.6E-06   | 1.6E-06   | 1.6E-06    | 1.6E-06     | 1.6E-06     | 1.6E-06     | 8.9E-07     |         |
| 1.5               | 1.3E-06                  | 1.5E-06     | 1.2E-06     | 1.2E-06     | 1.2E-06     | 1.6E-06     | 1.6E-06     | 1.6E-06    | 1.6E-06   | 1.0E-06   | 1.0E-06   | 1.0E-06    | 1.0E-06     | 1.0E-06     | 1.0E-06     | 6.9E-07     |         |
| 2.0               | 9.7E-07                  | 9.6E-07     | 9.9E-07     | 9.9E-07     | 9.9E-07     | 8.6E-07     | 8.9E-07     | 8.9E-07    | 8.9E-07   | 7.0E-07   | 7.0E-07   | 7.0E-07    | 7.0E-07     | 7.0E-07     | 7.0E-07     | 5.1E-07     |         |
| 2.5               | 7.0E-07                  | 6.9E-07     | 6.9E-07     | 6.9E-07     | 6.9E-07     | 5.0E-07     | 5.1E-07     | 5.1E-07    | 5.1E-07   | 5.1E-07   | 5.1E-07   | 5.1E-07    | 5.1E-07     | 5.1E-07     | 5.1E-07     | 4.0E-07     |         |
| 3.0               | 5.1E-07                  | 5.1E-07     | 5.1E-07     | 5.0E-07     | 3.9E-07     | 3.9E-07     | 3.9E-07     | 3.9E-07    | 3.9E-07   | 3.9E-07   | 3.9E-07   | 3.9E-07    | 3.9E-07     | 3.9E-07     | 3.9E-07     | 3.1E-07     |         |
| 3.5               | 3.9E-07                  | 3.9E-07     | 3.9E-07     | 3.9E-07     | 3.9E-07     | 3.1E-07     | 3.1E-07     | 3.1E-07    | 3.1E-07   | 3.1E-07   | 3.1E-07   | 3.1E-07    | 3.1E-07     | 3.1E-07     | 3.1E-07     | 2.6E-07     |         |
| 4.0               | 3.1E-07                  | 3.1E-07     | 3.1E-07     | 3.1E-07     | 3.1E-07     | 2.8E-07     | 2.8E-07     | 2.8E-07    | 2.8E-07   | 2.8E-07   | 2.8E-07   | 2.8E-07    | 2.8E-07     | 2.8E-07     | 2.8E-07     | 2.1E-07     |         |
| 4.5               | 2.6E-07                  | 3.8E-07     | 2.8E-07     | 2.8E-07     | 2.8E-07     | 2.8E-07     | 2.8E-07     | 2.8E-07    | 2.8E-07   | 2.1E-07   | 2.1E-07   | 2.1E-07    | 2.1E-07     | 2.1E-07     | 2.1E-07     | 1.5E-07     |         |
| 5.0               | 2.1E-07                  | 2.1E-07     | 2.1E-07     | 2.1E-07     | 2.1E-07     | 2.1E-07     | 2.1E-07     | 2.1E-07    | 2.1E-07   | 1.8E-07   | 1.8E-07   | 1.8E-07    | 1.8E-07     | 1.8E-07     | 1.8E-07     | 1.2E-07     |         |
| 6.0               | 1.5E-07                  | 1.5E-07     | 1.5E-07     | 1.5E-07     | 1.5E-07     | 1.5E-07     | 1.5E-07     | 1.5E-07    | 1.5E-07   | 1.2E-07   | 1.2E-07   | 1.2E-07    | 1.2E-07     | 1.2E-07     | 1.2E-07     | 9.4E-08     |         |
| 7.0               | 1.2E-07                  | 1.2E-07     | 1.2E-07     | 1.2E-07     | 1.2E-07     | 9.3E-08     | 9.3E-08     | 9.3E-08    | 9.3E-08   | 9.3E-08   | 9.3E-08   | 9.3E-08    | 9.3E-08     | 9.3E-08     | 9.3E-08     | 7.6E-08     |         |
| 8.0               | 9.4E-08                  | 9.3E-08     | 9.3E-08     | 9.3E-08     | 9.3E-08     | 9.3E-08     | 9.3E-08     | 9.3E-08    | 9.3E-08   | 7.6E-08   | 7.6E-08   | 7.6E-08    | 7.6E-08     | 7.6E-08     | 7.6E-08     | 6.3E-08     |         |
| 9.0               | 7.6E-08                  | 7.6E-08     | 7.6E-08     | 7.6E-08     | 7.6E-08     | 7.6E-08     | 7.6E-08     | 7.6E-08    | 7.6E-08   | 6.3E-08   | 6.3E-08   | 6.3E-08    | 6.3E-08     | 6.3E-08     | 6.3E-08     | 5.1E-08     |         |
| 10.0              | 6.3E-08                  | 6.3E-08     | 6.3E-08     | 6.3E-08     | 6.3E-08     | 6.3E-08     | 6.3E-08     | 6.3E-08    | 6.3E-08   | 5.1E-08   | 5.1E-08   | 5.1E-08    | 5.1E-08     | 5.1E-08     | 5.1E-08     | 4.0E-08     |         |
| 15.0              | 3.1E-08                  | 3.1E-08     | 3.1E-08     | 3.1E-08     | 3.1E-08     | 3.1E-08     | 3.1E-08     | 3.1E-08    | 3.1E-08   | 3.1E-08   | 3.1E-08   | 3.1E-08    | 3.1E-08     | 3.1E-08     | 3.1E-08     | 1.9E-08     |         |
| 20.0              | 1.9E-08                  | 1.9E-08     | 1.9E-08     | 1.9E-08     | 1.9E-08     | 1.9E-08     | 1.9E-08     | 1.9E-08    | 1.9E-08   | 1.9E-08   | 1.9E-08   | 1.9E-08    | 1.9E-08     | 1.9E-08     | 1.9E-08     | 1.3E-08     |         |
| 25.0              | 1.3E-08                  | 1.3E-08     | 1.3E-08     | 1.3E-08     | 1.3E-08     | 1.3E-08     | 1.3E-08     | 1.3E-08    | 1.3E-08   | 1.3E-08   | 1.3E-08   | 1.3E-08    | 1.3E-08     | 1.3E-08     | 1.3E-08     | 9.1E-09     |         |
| 30.0              | 9.1E-09                  | 9.1E-09     | 9.1E-09     | 9.1E-09     | 9.1E-09     | 9.1E-09     | 9.1E-09     | 9.1E-09    | 9.1E-09   | 9.1E-09   | 9.1E-09   | 9.1E-09    | 9.1E-09     | 9.1E-09     | 9.1E-09     | 6.9E-09     |         |
| 40.0              | 5.5E-09                  | 5.5E-09     | 5.5E-09     | 5.5E-09     | 5.5E-09     | 5.5E-09     | 5.5E-09     | 5.5E-09    | 5.5E-09   | 5.5E-09   | 5.5E-09   | 5.5E-09    | 5.5E-09     | 5.5E-09     | 5.5E-09     | 4.0E-09     |         |
| 50.0              | 3.7E-09                  | 3.7E-09     | 3.7E-09     | 3.7E-09     | 3.7E-09     | 3.7E-09     | 3.7E-09     | 3.7E-09    | 3.7E-09   | 3.7E-09   | 3.7E-09   | 3.7E-09    | 3.7E-09     | 3.7E-09     | 3.7E-09     | 2.1E-09     |         |
| MAX               | 1.9E-06                  | 1.8E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06     | 4.9E-06     | 5.1E-06     | 5.1E-06    | 4.6E-06   | 4.7E-06   | 4.7E-06   | 4.7E-06    | 4.2E-06     | 4.4E-06     | 4.9E-06     | 4.4E-06     | 2.1E-06 |
| CONC              | .7                       | .7          | .7          | .7          | .7          | .8          | .8          | .8         | .7        | .6        | .6        | .6         | .5          | .6          | .5          | .5          | .7      |
| DIST(MI)          | .7                       | .7          | .7          | .7          | .7          | .7          | .7          | .7         | .7        | .7        | .7        | .7         | .7          | .7          | .7          | .7          | .7      |

TABLE NO. 09-3

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
STACK RELEASE NORMAL FLOW  
STABILITY UNSTABLE  
SPEED 7 MPH

192- 214- 237- 259- 282- 304- 327- 349- 371- 393- 415- 437- 459- 481- 503- 525- 547- 569- 591- 613- 635- 657- 679- 701- 723- 745- 767- 789- 811- 833- 855- 877- 899- 921- 943- 965- 987- 1009- 1031- 1053- 1075- 1097- 1119- 1141- 1163- 1185- 1207- 1229- 1251- 1273- 1295- 1317- 1339- 1361- 1383- 1405- 1427- 1449- 1471- 1493- 1515- 1537- 1559- 1581- 1603- 1625- 1647- 1669- 1691- 1713- 1735- 1757- 1779- 1801- 1823- 1845- 1867- 1889- 1911- 1933- 1955- 1977- 1999- 2021- 2043- 2065- 2087- 2109- 2131- 2153- 2175- 2197- 2219- 2241- 2263- 2285- 2307- 2329- 2351- 2373- 2395- 2417- 2439- 2461- 2483- 2505- 2527- 2549- 2571- 2593- 2615- 2637- 2659- 2681- 2703- 2725- 2747- 2769- 2791- 2813- 2835- 2857- 2879- 2901- 2923- 2945- 2967- 2989- 3011- 3033- 3055- 3077- 3099- 3121- 3143- 3165- 3187- 3209- 3231- 3253- 3275- 3297- 3319- 3341- 3363- 3385- 3407- 3429- 3451- 3473- 3495- 3517- 3539- 3561- 3583- 3605- 3627- 3649- 3671- 3693- 3715- 3737- 3759- 3781- 3803- 3825- 3847- 3869- 3891- 3913- 3935- 3957- 3979- 4001- 4023- 4045- 4067- 4089- 4111- 4133- 4155- 4177- 4199- 4221- 4243- 4265- 4287- 4309- 4331- 4353- 4375- 4397- 4419- 4441- 4463- 4485- 4507- 4529- 4551- 4573- 4595- 4617- 4639- 4661- 4683- 4705- 4727- 4749- 4771- 4793- 4815- 4837- 4859- 4881- 4903- 4925- 4947- 4969- 4991- 5013- 5035- 5057- 5079- 5101- 5123- 5145- 5167- 5189- 5211- 5233- 5255- 5277- 5299- 5321- 5343- 5365- 5387- 5409- 5431- 5453- 5475- 5497- 5519- 5541- 5563- 5585- 5607- 5629- 5651- 5673- 5695- 5717- 5739- 5761- 5783- 5805- 5827- 5849- 5871- 5893- 5915- 5937- 5959- 5981- 6003- 6025- 6047- 6069- 6091- 6113- 6135- 6157- 6179- 6201- 6223- 6245- 6267- 6289- 6311- 6333- 6355- 6377- 6399- 6421- 6443- 6465- 6487- 6509- 6531- 6553- 6575- 6597- 6619- 6641- 6663- 6685- 6707- 6729- 6751- 6773- 6795- 6817- 6839- 6861- 6883- 6905- 6927- 6949- 6971- 6993- 7015- 7037- 7059- 7081- 7103- 7125- 7147- 7169- 7191- 7213- 7235- 7257- 7279- 7301- 7323- 7345- 7367- 7389- 7411- 7433- 7455- 7477- 7499- 7521- 7543- 7565- 7587- 7609- 7631- 7653- 7675- 7697- 7719- 7741- 7763- 7785- 7807- 7829- 7851- 7873- 7895- 7917- 7939- 7961- 7983- 8005- 8027- 8049- 8071- 8093- 8115- 8137- 8159- 8181- 8203- 8225- 8247- 8269- 8291- 8313- 8335- 8357- 8379- 8401- 8423- 8445- 8467- 8489- 8511- 8533- 8555- 8577- 8599- 8621- 8643- 8665- 8687- 8709- 8731- 8753- 8775- 8797- 8819- 8841- 8863- 8885- 8907- 8929- 8951- 8973- 8995- 9017- 9039- 9061- 9083- 9105- 9127- 9149- 9171- 9193- 9215- 9237- 9259- 9281- 9303- 9325- 9347- 9369- 9391- 9413- 9435- 9457- 9479- 9501- 9523- 9545- 9567- 9589- 9611- 9633- 9655- 9677- 9699- 9721- 9743- 9765- 9787- 9809- 9831- 9853- 9875- 9897- 9919- 9941- 9963- 9985- 10007- 10029- 10051- 10073- 10095- 10117- 10139- 10161- 10183- 10205- 10227- 10249- 10271- 10293- 10315- 10337- 10359- 10381- 10403- 10425- 10447- 10469- 10491- 10513- 10535- 10557- 10579- 10601- 10623- 10645- 10667- 10689- 10711- 10733- 10755- 10777- 10799- 10821- 10843- 10865- 10887- 10909- 10931- 10953- 10975- 10997- 11019- 11041- 11063- 11085- 11107- 11129- 11151- 11173- 11195- 11217- 11239- 11261- 11283- 11305- 11327- 11349- 11371- 11393- 11415- 11437- 11459- 11481- 11503- 11525- 11547- 11569- 11591- 11613- 11635- 11657- 11679- 11701- 11723- 11745- 11767- 11789- 11811- 11833- 11855- 11877- 11899- 11921- 11943- 11965- 11987- 12009- 12031- 12053- 12075- 12097- 12119- 12141- 12163- 12185- 12207- 12229- 12251- 12273- 12295- 12317- 12339- 12361- 12383- 12405- 12427- 12449- 12471- 12493- 12515- 12537- 12559- 12581- 12603- 12625- 12647- 12669- 12691- 12713- 12735- 12757- 12779- 12801- 12823- 12845- 12867- 12889- 12911- 12933- 12955- 12977- 12999- 13021- 13043- 13065- 13087- 13109- 13131- 13153- 13175- 13197- 13219- 13241- 13263- 13285- 13307- 13329- 13351- 13373- 13395- 13417- 13439- 13461- 13483- 13505- 13527- 13549- 13571- 13593- 13615- 13637- 13659- 13681- 13703- 13725- 13747- 13769- 13791- 13813- 13835- 13857- 13879- 13901- 13923- 13945- 13967- 13989- 14011- 14033- 14055- 14077- 14099- 14121- 14143- 14165- 14187- 14209- 14231- 14253- 14275- 14297- 14319- 14341- 14363- 14385- 14407- 14429- 14451- 14473- 14495- 14517- 14539- 14561- 14583- 14605- 14627- 14649- 14671- 14693- 14715- 14737- 14759- 14781- 14803- 14825- 14847- 14869- 14891- 14913- 14935- 14957- 14979- 15001- 15023- 15045- 15067- 15089- 15111- 15133- 15155- 15177- 15199- 15221- 15243- 15265- 15287- 15309- 15331- 15353- 15375- 15397- 15419- 15441- 15463- 15485- 15507- 15529- 15551- 15573- 15595- 15617- 15639- 15661- 15683- 15705- 15727- 15749- 15771- 15793- 15815- 15837- 15859- 15881- 15903- 15925- 15947- 15969- 15991- 16013- 16035- 16057- 16079- 16101- 16123- 16145- 16167- 16189- 16211- 16233- 16255- 16277- 16299- 16321- 16343- 16365- 16387- 16409- 16431- 16453- 16475- 16497- 16519- 16541- 16563- 16585- 16607- 16629- 16651- 16673- 16695- 16717- 16739- 16761- 16783- 16805- 16827- 16849- 16871- 16893- 16915- 16937- 16959- 16981- 17003- 17025- 17047- 17069- 17091- 17113- 17135- 17157- 17179- 17201- 17223- 17245- 17267- 17289- 17311- 17333- 17355- 17377- 17399- 17421- 17443- 17465- 17487- 17509- 17531- 17553- 17575- 17597- 17619- 17641- 17663- 17685- 17707- 17729- 17751- 17773- 17795- 17817- 17839- 17861- 17883- 17905- 17927- 17949- 17971- 17993- 18015- 18037- 18059- 18081- 18103- 18125- 18147- 18169- 18191- 18213- 18235- 18257- 18279- 18301- 18323- 18345- 18367- 18389- 18411- 18433- 18455- 18477- 18499- 18521- 18543- 18565- 18587- 18609- 18631- 18653- 18675- 18697- 18719- 18741- 18763- 18785- 18807- 18829- 18851- 18873- 18895- 18917- 18939- 18961- 18983- 19005- 19027- 19049- 19071- 19093- 19115- 19137- 19159- 19181- 19203- 19225- 19247- 19269- 19291- 19313- 19335- 19357- 19379- 19401- 19423- 19445- 19467- 19489- 19511- 19533- 19555- 19577- 19599- 19621- 19643- 19665- 19687- 19709- 19731- 19753- 19775- 19797- 19819- 19841- 19863- 19885- 19907- 19929- 19951- 19973- 19995- 20017- 20039- 20061- 20083- 20105- 20127- 20149- 20171- 20193- 20215- 20237- 20259- 20281- 20303- 20325- 20347- 20369- 20391- 20413- 20435- 20457- 20479- 20501- 20523- 20545- 20567- 20589- 20611- 20633- 20655- 20677- 20699- 20721- 20743- 20765- 20787- 20809- 20831- 20853- 20875- 20897- 20919- 20941- 20963- 20985- 21007- 21029- 21051- 21073- 21095- 21117- 21139- 21161- 21183- 21205- 21227- 21249- 21271- 21293- 21315- 21337- 21359- 21381- 21403- 21425- 21447- 21469- 21491- 21513- 21535- 21557- 21579- 21601- 21623- 21645- 21667- 21689- 21711- 21733- 21755- 21777- 21799- 21821- 21843- 21865- 21887- 21909- 21931- 21953- 21975- 21997- 22019- 22041- 22063- 22085- 22107- 22129- 22151- 22173- 22195- 22217- 22239- 22261- 22283- 22305- 22327- 22349- 22371- 22393- 22415- 22437- 22459- 22481- 22503- 22525- 22547- 22569- 22591- 22613- 22635- 22657- 22679- 22701- 22723- 22745- 22767- 22789- 22811- 22833- 22855- 22877- 22899- 22921- 22943- 22965- 22987- 23009- 23031- 23053- 23075- 23097- 23119- 23141- 23163- 23185- 23207- 23229- 23251- 23273- 23295- 23317- 23339- 23361- 23383- 23405- 23427- 23449- 23471- 23493- 23515- 23537- 23559- 23581- 23603- 23625- 23647- 23669- 23691- 23713- 23735- 23757- 23779- 23801- 23823- 23845- 23867- 23889- 23911- 23933- 23955- 23977- 23999- 24021- 24043- 24065- 24087- 24109- 24131- 24153- 24175- 24197- 24219- 24241- 24263- 24285- 24307- 24329- 24351- 24373- 24395- 24417- 24439- 24461- 24483- 24505- 24527- 24549- 24571- 24593- 24615- 24637- 24659- 24681- 24703- 24725- 24747- 24769- 24791- 24813- 24835- 24857- 24879- 24901- 24923- 24945- 24967- 24989- 25011- 25033- 25055- 25077- 25099- 25121- 25143- 25165- 25187- 25209- 25231- 25253- 25275- 25297- 25319- 25341- 25363- 25385- 25407- 25429- 25451- 25473- 25495- 25517- 25539- 25561- 25583- 25605- 25627- 25649- 25671- 25693- 25715- 25737- 25759- 25781- 25803- 25825- 25847- 25869- 25891- 25913- 25935- 25957- 25979- 26001- 26023- 26045- 26067- 26089- 26111- 26133- 26155- 26177- 26199- 26221- 26243- 26265- 26287- 26309- 26331- 26353- 26375- 26397- 26419- 26441- 26463- 26485- 26507- 26529- 26551- 26573- 26595- 26617- 26639- 26661- 26683- 26705- 26727- 26749- 26771- 26793- 26815- 26837- 26859- 26881- 26903- 26925- 26947- 26969- 26991- 27013- 27035- 27057- 27079- 27101- 27123- 27145- 27167- 27189- 27211- 27233- 27255- 27277- 27299- 27321- 27343- 27365- 27387- 27409- 27431- 27453- 27475- 27497- 27519- 27541- 27563- 27585- 27607- 27629- 27651- 27673- 27695- 27717- 27739- 27761- 27783- 27805- 27827- 27849- 27871- 27893- 27915- 27937- 27959- 27981- 28003- 28025- 28047- 28069- 28091- 28113- 28135- 28157- 28179- 28201- 28223- 28245- 28267- 28289- 28311- 28333- 28355- 28377- 28399- 28421- 28443- 28465- 28487- 28509- 28531- 28553- 28575- 28597- 28619- 28641- 28663- 28685- 28707- 28729- 28751- 28773- 28795- 28817- 28839- 28861- 28883- 28905- 28927- 28949- 28971- 28993- 29015- 29037- 29059- 29081- 29103- 29125- 29147- 29169- 29191- 29213- 29235- 29257- 29279- 29301- 29323- 29345- 29367- 29389- 29411- 29433- 29455- 29477- 29499- 29521- 29543- 29565- 29587- 29609- 29631- 29653- 29675- 29697- 29719- 29741- 29763- 29785- 29807- 29829- 29851- 29873- 29895- 29917- 29939- 29961- 29983- 30005- 30027- 30049- 30071- 30093- 30115- 30137- 30159- 30181- 30203- 30225- 30247- 30269- 30291- 30313- 30335- 30357- 30379- 30401- 30423- 30445- 30467- 30489- 30511- 30533- 30555- 30577- 30599- 30621- 30643- 30665- 30687- 30709- 30731- 30753- 30775- 30797- 30819- 30841- 30863- 30885- 30907- 30929- 30951- 30973- 30995- 31017- 31039- 31061- 31083- 31105- 31127- 31149- 31171- 31193- 31215- 31237- 31259- 31281- 31303- 31325- 31347- 31369- 31391- 31413- 31435- 31457- 31479- 31501- 31523- 31545- 31567- 31589- 31611- 31633- 31655- 31677- 31699- 31721- 31743- 31765- 31787- 31809- 31831- 31853- 31875- 31897- 31919- 31941- 31963- 31985- 32007- 32029- 32051- 32073- 32095- 32117- 32139- 32161- 32183- 32205- 32227- 32249- 32271- 32293- 32315- 32337- 32359- 32381- 32403- 32425- 32447- 32469- 32491- 32513- 32535- 32557- 32579- 32601- 32623- 32645- 32667- 32689- 32711- 32733- 32755- 32777- 32799- 32821- 32843- 32865- 32887- 32909- 32931- 32953- 32975- 32997- 33019- 33041- 33063- 33085- 33107- 33129- 33151- 33173- 33195- 33217- 33239- 33261- 33283- 33305- 33327- 33349- 33371- 33393- 33415- 33437- 33459- 33481- 33503- 33525- 33547- 33569- 33591- 33613- 33635- 33657- 33679- 33701- 33723- 33745- 33767- 33789- 33811- 33833- 33855- 33877- 33899- 33921- 33943- 33965- 33987- 34009- 34031- 34053- 34075- 34097- 34119- 34141- 34163- 34185- 34207- 34229- 34251- 34273- 34295- 34317- 34339- 34361- 34383- 34405- 34427- 34449- 34471- 34493- 34515- 34537- 34559- 34581- 34603- 34625- 34647- 34669- 34691- 34713- 34735- 34757- 34779- 34801- 34823- 34845- 34867- 34889- 34911- 34933- 34955- 34977- 34999- 35021- 35043- 35065- 35087- 35109- 35131- 35153- 35175- 35197- 35219- 35241- 35263- 35285- 35307- 35329- 35351- 35373- 35395- 35417- 35439- 35461- 35483- 35505- 35527- 35549- 35571- 35593- 35615- 35637- 35659- 35681- 35703- 35725- 35747- 35769- 35791- 35813- 35835- 35857- 35879- 35901- 35923- 35945- 35967- 35989- 36011- 36033- 36055- 36077- 36099- 36121- 36143- 36165- 36187- 36209- 36231- 36253- 36275- 36297- 36319- 36341- 36363- 36385- 36407- 36429- 36451- 36473- 36495- 36517- 36539- 36561- 36583- 36605- 36627- 36649- 36671- 36693- 36715- 36737- 36759- 36781- 36803- 36825- 36847- 36869- 36891- 36913- 36935- 36957- 36979- 37001- 37023- 37045- 37067- 37089- 37111- 37133- 37155- 37177- 37199- 37221- 37243- 37265- 37287- 37309- 37331- 37353- 37375- 37397- 37419- 37441- 37463- 37485- 37507- 37529- 37551- 37573- 37595- 37617- 37639- 37661- 37683- 37705- 37727- 37749- 37771- 37793- 37815- 37837- 37859- 37881- 37903- 37925- 37947- 37969- 37991- 38013- 38035- 38057- 38079- 38101- 38123- 38145- 38167- 38189- 38211- 38233- 38255- 38277- 38299- 38321- 38343- 38365- 38387- 38409- 38431- 38453- 38475- 38497- 38519- 38541- 38563- 38585- 38607- 38629- 38651- 38673- 38695- 38717- 38739- 38761- 38783- 38805- 38827- 38849- 38871- 38893- 38915- 38937- 38959- 38981- 39003- 39025- 39047- 39069- 39091- 39113- 39135- 39157- 39179- 39201- 39223- 39245- 39267- 39289- 39311- 39333- 39355- 39377- 39399- 39421- 39443- 39465- 39487- 39509- 39531- 39553- 39575- 39597- 39619- 39641- 39663- 39685- 39707- 39729- 39751- 39773- 39795- 39817- 39839- 3













PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O DEPLETD  
STACK RELEASE NORMAL FLOW  
STABILITY NEUTRAL  
SPEED 22. MPH

|      |      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192- | 214- | 237- | 289- | 282- | 304- | 327- | 348- | 12- | 34- | 87- | 79- | 102- | 124- | 147- | 163- |
| 213  | 226  | 288  | 281  | 303  | 326  | 348  | 348  | 11  | 33  | 86  | 76  | 101  | 123  | 146  | 168  |

| DISTANCE<br>MILES | N       | NE      | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4                 | 2.2E-14 | 1.4E-14 | 1.4E-14 | 1.4E-14 | 9.8E-08 | 6.7E-09 | 7.3E-11 | 1.9E-10 | 1.1E-09 | 1.1E-09 | 2.5E-09 | 2.6E-09 | 8.8E-06 | 3.9E-06 | 1.4E-14 |
| 5                 | 1.0E-13 | 6.8E-14 | 6.8E-14 | 6.8E-14 | 1.6E-08 | 1.6E-08 | 1.8E-10 | 1.0E-09 | 2.2E-09 | 2.2E-09 | 4.9E-09 | 4.9E-09 | 1.5E-02 | 7.1E-08 | 6.8E-14 |
| 6                 | 3.7E-13 | 2.6E-13 | 2.6E-13 | 2.6E-13 | 2.5E-08 | 2.5E-08 | 3.8E-10 | 1.9E-09 | 4.0E-09 | 4.0E-09 | 8.2E-09 | 8.2E-09 | 2.5E-08 | 1.2E-08 | 2.6E-13 |
| 7                 | 8.4E-12 | 8.3E-12 | 6.3E-12 | 6.3E-12 | 7.1E-08 | 7.1E-08 | 3.8E-08 | 1.6E-08 | 2.1E-08 | 2.1E-08 | 3.3E-08 | 3.3E-08 | 2.9E-08 | 7.1E-08 | 3.8E-12 |
| 8                 | 1.9E-11 | 1.4E-11 | 1.4E-11 | 1.4E-11 | 9.3E-08 | 9.3E-08 | 7.2E-08 | 2.3E-08 | 3.9E-08 | 3.9E-08 | 3.9E-08 | 3.9E-08 | 9.3E-08 | 9.3E-08 | 6.3E-11 |
| 9                 | 3.9E-11 | 3.0E-11 | 3.0E-11 | 3.0E-11 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.2E-07 | 6.7E-08 | 1.4E-11 |
| 10                | 1.4E-10 | 1.1E-10 | 1.1E-10 | 1.1E-10 | 2.1E-07 | 2.1E-07 | 2.6E-07 | 2.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 1.4E-07 | 6.7E-08 | 3.0E-11 |
| 11                | 6.3E-10 | 5.2E-10 | 5.2E-10 | 5.2E-10 | 3.3E-07 | 3.3E-07 | 4.6E-07 | 4.6E-07 | 6.1E-07 | 6.1E-07 | 6.1E-07 | 6.1E-07 | 4.6E-07 | 2.8E-07 | 1.1E-10 |
| 12                | 2.8E-09 | 1.7E-09 | 1.7E-09 | 1.7E-09 | 4.8E-07 | 4.8E-07 | 6.1E-07 | 6.1E-07 | 8.1E-07 | 8.1E-07 | 8.1E-07 | 8.1E-07 | 6.1E-07 | 3.9E-07 | 5.2E-10 |
| 13                | 7.3E-09 | 2.2E-09 | 2.2E-09 | 2.2E-09 | 2.4E-08 | 2.4E-08 | 4.9E-07 | 4.9E-07 | 6.5E-07 | 6.5E-07 | 6.5E-07 | 6.5E-07 | 4.9E-07 | 3.7E-07 | 3.5E-09 |
| 14                | 1.0E-08 | 8.9E-08 | 8.9E-08 | 8.9E-08 | 3.2E-08 | 3.2E-08 | 7.0E-07 | 7.0E-07 | 9.0E-07 | 9.0E-07 | 9.0E-07 | 9.0E-07 | 7.0E-07 | 4.3E-07 | 4.9E-09 |
| 15                | 2.8E-07 | 7.4E-07 | 7.4E-07 | 7.4E-07 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.3E-06 | 3.3E-07 | 6.3E-08 |
| 16                | 6.6E-07 | 9.4E-07 | 9.4E-07 | 9.4E-07 | 3.5E-07 | 3.5E-07 | 1.0E-06 | 1.0E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.0E-06 | 1.4E-06 | 8.6E-08 |
| 17                | 9.2E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 8.0E-07 | 1.2E-06 | 2.9E-07 |
| 18                | 5.8E-07 | 5.6E-07 | 5.6E-07 | 5.6E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 6.3E-07 | 9.8E-07 | 4.6E-07 |
| 19                | 4.8E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07 | 5.3E-07 | 5.3E-07 | 5.3E-07 | 5.3E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 5.3E-07 | 7.3E-07 | 7.5E-07 |
| 20                | 4.1E-07 | 4.1E-07 | 4.1E-07 | 4.1E-07 | 4.5E-07 | 4.5E-07 | 4.5E-07 | 4.5E-07 | 5.4E-07 | 5.4E-07 | 5.4E-07 | 5.4E-07 | 4.5E-07 | 5.8E-07 | 5.0E-07 |
| 21                | 3.5E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07 | 4.0E-07 | 3.8E-07 | 4.8E-07 | 4.9E-07 |
| 22                | 2.7E-07 | 2.7E-07 | 2.7E-07 | 2.7E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 2.6E-07 | 4.2E-07 | 4.2E-07 |
| 23                | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 3.4E-07 | 2.6E-07 | 3.6E-07 | 3.6E-07 |
| 24                | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 2.0E-07 | 2.0E-07 | 2.0E-07 | 2.0E-07 | 2.7E-07 | 2.7E-07 | 2.7E-07 | 2.7E-07 | 2.0E-07 | 2.7E-07 | 2.7E-07 |
| 25                | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 1.7E-07 | 2.1E-07 | 2.1E-07 |
| 26                | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.4E-07 | 1.7E-07 | 1.7E-07 |
| 27                | 6.4E-08 | 6.4E-08 | 6.4E-08 | 6.4E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.4E-08 | 6.4E-08 | 6.4E-08 | 6.4E-08 | 6.3E-08 | 6.4E-08 | 6.4E-08 |
| 28                | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.0E-08 | 4.0E-08 | 4.0E-08 | 4.0E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.0E-08 | 4.1E-08 | 4.1E-08 |
| 29                | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.8E-08 | 2.8E-08 | 2.8E-08 | 2.8E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.8E-08 | 2.9E-08 | 2.9E-08 |
| 30                | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 | 2.2E-08 | 2.2E-08 | 2.2E-08 | 2.2E-08 | 2.1E-08 | 2.2E-08 | 2.2E-08 |
| 40                | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 |
| 50                | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 |

|     |          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|-----|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MAX | CONC     | 9.2E-07 | 9.4E-07 | 9.8E-07 | 9.8E-07 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 |
|     | DIST(MI) | 2.5     | 2.0     | 2.0     | 2.0     | 3.0     | 3.0     | 3.0     | 3.0     | 3.0     | 3.0     | 3.0     | 3.0     | 3.0     | 3.0     |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00- 9



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
STACK RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 1. MPH

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | MNW     | MV      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 192-              | 214-    | 237-    | 259-    | 282-    | 304-    | 327-    | 349-    | 1-      | 32      | 56      | 78      | 101     | 123     | 146     | 168     | 191     |
| 0.4               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.4               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.5               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.8               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.6               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.6               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.7               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.8               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.8               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 3.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 3.8               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 4.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 4.8               | 3.1E-13 | 1.7E-14 | 8.0E-15 | 5.5E-14 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 5.0               | 7.4E-11 | 1.0E-11 | 1.2E-13 | 9.3E-13 | 1.4E-14 | 2.4E-14 | 2.0E-13 | 9.3E-13 | 3.1E-14 | 9.5E-10 | 2.4E-11 | 3.0E-13 | 2.4E-11 | 6.3E-11 | 4.0E-10 | 3.9E-11 |
| 6.0               | 7.1E-09 | 3.8E-09 | 7.0E-11 | 8.8E-12 | 4.8E-11 | 6.8E-12 | 2.2E-11 | 1.8E-11 | 4.8E-11 | 6.2E-07 | 1.7E-10 | 3.0E-11 | 4.0E-10 | 4.0E-10 | 3.0E-11 | 2.9E-11 |
| 7.0               | 3.5E-07 | 2.1E-08 | 1.2E-09 | 1.8E-10 | 3.4E-10 | 3.4E-10 | 2.4E-10 | 6.3E-10 | 1.3E-09 | 1.3E-06 | 2.7E-08 | 1.0E-08 | 4.2E-08 | 1.3E-08 | 4.2E-08 | 2.4E-08 |
| 8.0               | 7.0E-07 | 1.1E-07 | 4.5E-08 | 2.2E-09 | 9.5E-09 | 2.2E-08 | 1.7E-09 | 3.8E-09 | 3.8E-09 | 1.6E-06 | 1.7E-07 | 2.3E-07 | 3.4E-07 | 1.8E-06 | 3.4E-06 | 3.3E-06 |
| 9.0               | 7.5E-06 | 8.5E-07 | 1.1E-07 | 1.4E-08 | 3.0E-08 | 8.9E-09 | 1.7E-09 | 1.4E-08 | 1.4E-08 | 2.8E-06 | 8.5E-07 | 4.8E-07 | 6.2E-07 | 5.8E-06 | 3.4E-06 | 4.5E-06 |
| 10.0              | 8.2E-06 | 1.3E-06 | 2.2E-07 | 3.6E-08 | 7.0E-08 | 2.6E-08 | 2.0E-08 | 3.5E-08 | 3.5E-08 | 3.8E-06 | 1.8E-06 | 2.1E-06 | 3.8E-06 | 6.3E-06 | 1.0E-05 | 1.1E-05 |
| 15.0              | 8.8E-06 | 3.1E-06 | 1.1E-06 | 8.9E-07 | 6.1E-07 | 3.4E-07 | 3.0E-07 | 4.2E-07 | 4.2E-07 | 5.5E-06 | 3.8E-06 | 5.4E-06 | 3.8E-06 | 7.6E-06 | 1.0E-05 | 1.0E-05 |
| 20.0              | 7.8E-06 | 4.4E-06 | 2.0E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 5.4E-06 | 6.4E-06 | 5.8E-06 | 6.8E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 |
| 25.0              | 6.5E-06 | 4.9E-06 | 2.4E-06 | 2.4E-06 | 2.0E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 5.1E-06 | 6.1E-06 | 7.0E-06 | 7.0E-06 |
| 30.0              | 5.4E-06 | 3.9E-06 | 2.8E-06 | 2.8E-06 | 2.0E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 5.1E-06 | 6.1E-06 | 7.0E-06 | 7.0E-06 |
| 40.0              | 4.3E-06 | 3.5E-06 | 2.1E-06 | 2.1E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.4E-06 | 5.1E-06 | 6.1E-06 | 6.1E-06 |
| 50.0              | 2.5E-06 | 2.5E-06 | 1.5E-06 | 1.5E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06 | 2.6E-06 | 2.2E-06 | 2.3E-06 | 2.3E-06 |
| MAX               |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| CONC              | 8.8E-06 | 6.4E-06 | 2.8E-06 | 2.8E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 6.4E-06 | 6.4E-06 | 8.1E-06 | 8.8E-06 | 7.6E-06 | 1.1E-05 | 1.1E-05 |
| DIST(MI)          | 15.0    | 20.0    | 30.0    | 30.0    | 30.0    | 30.0    | 40.0    | 30.0    | 30.0    | 20.0    | 20.0    | 25.0    | 20.0    | 15.0    | 10.0    | 10.0    |

TABLE NO. 00-11

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR



PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
 STACK RELEASE NORMAL FLOW  
 STABILITY SYABLE  
 SPEED 3. MPH

|      |      |      |      |      |      |      |     |    |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|-----|----|-----|-----|-----|-----|------|------|------|------|
| 192- | 214- | 237- | 259- | 282- | 304- | 326  | 348 | 11 | 3:1 | 34- | 57- | 79- | 102- | 124- | 147- | 168- |
| 213  | 236  | 258  | 281  | 303  | 327- | 349- | 371 | 12 | 3:1 | 58  | 78  | 101 | 123  | 146  | 168  | 191  |

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 4.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 4.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 5.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 5.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 6.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 6.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 7.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 7.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.00              | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.50              | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.00              | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.5               | 1.3E-08 | 4.4E-12 | 4.4E-12 | 3.9E-13 | 0.0     | 1.3E-15 | 1.3E-15 | 3.4E-14 | 1.8E-12 | 1.8E-10 | 3.4E-14 | 8.9E-13 | 1.8E-12 | 6.9E-13 | 0.0     | 0.0     |
| 3.0               | 1.2E-08 | 8.9E-10 | 8.9E-10 | 2.4E-11 | 1.2E-11 | 4.5E-11 | 8.4E-11 | 8.9E-10 | 2.6E-08 | 8.5E-07 | 3.2E-08 | 1.5E-08 | 2.6E-08 | 2.0E-08 | 3.8E-13 | 2.9E-14 |
| 3.5               | 7.9E-08 | 7.9E-08 | 6.8E-08 | 3.5E-08 | 9.7E-10 | 8.9E-10 | 6.8E-08 | 6.8E-08 | 1.6E-08 | 2.3E-06 | 3.7E-07 | 1.0E-08 | 1.6E-08 | 7.9E-08 | 7.9E-08 | 5.2E-07 |
| 4.0               | 2.0E-07 | 3.7E-07 | 2.5E-08 | 3.3E-08 | 5.2E-08 | 3.5E-08 | 5.2E-08 | 5.2E-08 | 8.2E-08 | 7.2E-06 | 2.0E-06 | 1.0E-07 | 3.7E-07 | 3.7E-07 | 2.0E-07 | 8.5E-07 |
| 4.5               | 1.2E-06 | 6.9E-07 | 9.2E-08 | 4.9E-08 | 1.7E-07 | 1.3E-08 | 1.8E-08 | 6.7E-08 | 1.2E-07 | 1.1E-08 | 2.8E-06 | 3.9E-07 | 2.8E-06 | 4.1E-06 | 1.2E-06 | 3.4E-06 |
| 5.0               | 2.4E-06 | 9.8E-07 | 3.9E-07 | 1.1E-07 | 3.1E-07 | 3.1E-07 | 4.5E-07 | 4.5E-07 | 6.8E-07 | 2.3E-05 | 3.4E-06 | 1.6E-06 | 4.8E-06 | 4.8E-06 | 1.6E-06 | 9.8E-06 |
| 6.0               | 6.4E-08 | 5.0E-06 | 8.3E-07 | 3.0E-07 | 6.8E-07 | 2.4E-07 | 4.5E-07 | 3.7E-07 | 8.8E-07 | 2.3E-05 | 4.4E-06 | 2.9E-06 | 1.2E-05 | 8.1E-06 | 1.2E-05 | 9.8E-06 |
| 7.0               | 1.4E-08 | 8.8E-06 | 1.8E-06 | 5.7E-07 | 1.8E-06 | 8.1E-07 | 8.1E-07 | 6.8E-07 | 1.1E-06 | 1.8E-05 | 5.0E-06 | 6.7E-06 | 1.2E-05 | 9.5E-06 | 1.8E-05 | 1.9E-05 |
| 8.0               | 1.2E-08 | 6.7E-06 | 4.9E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.5E-06 | 1.5E-05 | 8.0E-06 | 9.0E-06 | 1.0E-05 | 1.5E-05 | 1.6E-05 | 1.6E-05 |
| 9.0               | 1.2E-08 | 1.0E-05 | 4.9E-06 | 1.8E-06 | 2.7E-06 | 1.5E-06 | 1.5E-06 | 1.3E-06 | 1.8E-06 | 1.3E-05 | 8.5E-06 | 9.2E-06 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 |
| 10.0              | 1.2E-08 | 9.1E-06 | 4.9E-06 | 2.1E-06 | 2.9E-06 | 1.7E-06 | 1.7E-06 | 1.6E-06 | 2.1E-06 | 1.1E-05 | 9.6E-06 | 1.0E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 |
| 15.0              | 6.7E-06 | 8.8E-06 | 4.0E-06 | 3.2E-06 | 3.0E-06 | 2.3E-06 | 2.3E-06 | 2.1E-06 | 2.5E-06 | 6.5E-06 | 6.1E-06 | 6.8E-06 | 6.1E-06 | 6.7E-06 | 6.7E-06 | 6.7E-06 |
| 20.0              | 4.4E-06 | 4.1E-06 | 3.1E-06 | 2.1E-06 | 2.6E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.3E-06 | 4.3E-06 | 4.4E-06 | 4.3E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 |
| 25.0              | 3.1E-06 | 3.0E-06 | 2.4E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.9E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 |
| 30.0              | 2.2E-06 | 2.2E-06 | 1.8E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 |
| 40.0              | 1.3E-06 | 1.3E-06 | 1.1E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 |
| 50.0              | 7.5E-07 | 7.5E-07 | 6.8E-07 | 6.9E-07 | 6.2E-07 | 6.2E-07 | 6.2E-07 | 6.1E-07 | 6.3E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 |

|          |      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MAX      | CONC | 1.4E-05 | 1.0E-05 | 4.9E-06 | 3.2E-06 | 2.3E-06 | 2.3E-06 | 2.1E-06 | 2.8E-06 | 2.8E-06 | 1.0E-05 | 1.0E-05 | 1.2E-05 | 1.5E-05 | 1.8E-05 | 1.9E-05 |
| DIST(MI) | 7.0  | 9.0     | 15.0    | 15.0    | 15.0    | 15.0    | 15.0    | 15.0    | 15.0    | 15.0    | 15.0    | 10.0    | 6.0     | 8.0     | 7.0     | 7.0     |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-13

PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

| DISTANCE<br>MILES | WIND DIRECTION RANGES |             |             |             |             |             |             |             |             |             | DOWN WIND SECTOR BEARINGS |         |         |         |         |         |         |         |         |         |
|-------------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                   | 192-<br>213           | 214-<br>236 | 237-<br>258 | 259-<br>281 | 282-<br>303 | 304-<br>326 | 327-<br>348 | 349-<br>366 | 367-<br>387 | 388-<br>408 | SSW                       | S       | SSW     | SW      | WSW     | W       | MNW     | NW      | NNW     | N       |
| .40               | 0.0                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .40               | 0.0                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .80               | 0.0                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .80               | 0.0                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .80               | 0.0                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .60               | 0.0                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .70               | 0.0                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .70               | 0.0                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.00              | 0.0                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.80              | 0.0                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.00              | 8.1E-15               | 6.5E-14     | 8.5E-14     | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.5               | 1.5E-08               | 1.1E-10     | 1.3E-10     | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 3.0               | 7.6E-08               | 7.9E-09     | 7.9E-09     | 3.3E-10     | 1.8E-10     | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0                       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 3.5               | 2.9E-07               | 2.9E-07     | 3.4E-08     | 2.5E-08     | 6.4E-09     | 4.1E-09     | 6.4E-08     | 3.4E-08     | 7.9E-08     | 2.0E-08     | 2.1E-06                   | 1.7E-07 | 1.7E-07 | 1.3E-08 | 2.0E-08 | 1.5E-08 | 2.8E-08 | 2.6E-08 | 1.3E-11 | 1.3E-12 |
| 4.0               | 5.4E-07               | 9.1E-07     | 9.1E-07     | 3.3E-08     | 1.7E-07     | 1.6E-08     | 1.7E-07     | 1.6E-08     | 1.7E-07     | 9.8E-06     | 4.6E-06                   | 3.7E-06 | 3.7E-06 | 3.1E-07 | 9.1E-07 | 8.3E-07 | 9.1E-07 | 8.4E-07 | 2.9E-07 | 1.4E-06 |
| 4.5               | 2.1E-06               | 1.3E-06     | 2.4E-07     | 1.4E-07     | 4.1E-07     | 4.2E-08     | 5.8E-08     | 1.8E-07     | 3.1E-07     | 1.2E-05     | 4.2E-06                   | 8.3E-07 | 4.2E-06 | 8.3E-07 | 4.2E-06 | 8.3E-07 | 4.2E-06 | 8.3E-07 | 4.2E-06 | 8.3E-07 |
| 5.0               | 3.4E-06               | 1.7E-06     | 7.8E-07     | 2.4E-07     | 6.1E-07     | 8.7E-08     | 1.1E-07     | 3.1E-07     | 6.1E-07     | 1.9E-05     | 4.6E-06                   | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 |
| 6.0               | 6.6E-06               | 5.5E-06     | 1.2E-06     | 5.1E-07     | 1.0E-06     | 4.2E-07     | 7.3E-07     | 6.1E-07     | 1.0E-06     | 1.4E-06     | 4.8E-06                   | 3.5E-06 | 3.5E-06 | 3.5E-06 | 3.5E-06 | 3.5E-06 | 3.5E-06 | 3.5E-06 | 3.5E-06 | 3.5E-06 |
| 7.0               | 1.1E-05               | 5.3E-06     | 1.8E-06     | 1.8E-06     | 7.9E-07     | 2.2E-06     | 1.1E-06     | 1.1E-06     | 9.2E-07     | 1.4E-06     | 1.2E-06                   | 1.4E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 |
| 8.0               | 9.0E-06               | 5.8E-06     | 4.4E-06     | 1.3E-06     | 2.6E-06     | 2.6E-06     | 1.3E-06     | 1.3E-06     | 1.3E-06     | 1.3E-06     | 1.3E-06                   | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 |
| 9.0               | 8.2E-06               | 7.3E-06     | 4.2E-06     | 1.9E-06     | 1.9E-06     | 1.9E-06     | 1.9E-06     | 1.9E-06     | 1.9E-06     | 1.9E-06     | 1.9E-06                   | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 |
| 10.0              | 7.1E-06               | 6.4E-06     | 4.0E-06     | 2.0E-06     | 2.0E-06     | 2.0E-06     | 2.0E-06     | 2.0E-06     | 2.0E-06     | 2.0E-06     | 2.0E-06                   | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 |
| 15.0              | 4.0E-06               | 3.8E-06     | 2.8E-06     | 2.4E-06     | 2.3E-06     | 2.3E-06     | 2.3E-06     | 2.3E-06     | 2.3E-06     | 2.3E-06     | 2.3E-06                   | 2.3E-06 | 2.3E-06 | 2.3E-06 | 2.3E-06 | 2.3E-06 | 2.3E-06 | 2.3E-06 | 2.3E-06 | 2.3E-06 |
| 20.0              | 2.6E-06               | 2.6E-06     | 2.1E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06     | 1.8E-06                   | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 |
| 25.0              | 1.9E-06               | 1.8E-06     | 1.6E-06     | 1.4E-06     | 1.4E-06     | 1.4E-06     | 1.4E-06     | 1.4E-06     | 1.4E-06     | 1.4E-06     | 1.4E-06                   | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 |
| 30.0              | 1.4E-06               | 1.4E-06     | 1.2E-06     | 1.2E-06     | 1.2E-06     | 1.2E-06     | 1.2E-06     | 1.2E-06     | 1.2E-06     | 1.2E-06     | 1.2E-06                   | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 |
| 40.0              | 8.2E-07               | 7.5E-07     | 7.5E-07     | 7.5E-07     | 7.5E-07     | 7.5E-07     | 7.5E-07     | 7.5E-07     | 7.5E-07     | 7.5E-07     | 7.5E-07                   | 7.5E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 | 7.5E-07 |
| 50.0              | 5.2E-07               | 4.9E-07     | 4.9E-07     | 4.9E-07     | 4.9E-07     | 4.9E-07     | 4.9E-07     | 4.9E-07     | 4.9E-07     | 4.9E-07     | 4.9E-07                   | 4.9E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07 | 4.9E-07 |

MAX  
 CONC 1.1E-05 7.3E-06 4.4E-06 2.4E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06 1.8E-06  
 DIST(MI) 7.0 9.0 15.0 15.0 10.0 15.0 15.0 15.0 15.0 15.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-13



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
STACK RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 7 MPH

182- 214- 237- 289- 304- 327- 349- 12- 34- 87- 79- 102- 124- 147- 169-  
213 236 258 281 303 326 348 11 33 56 78 101 123 146 168 191

| DISTANCE<br>MILES | DOWN WIND SECTOR BEARING |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|-------------------|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                   | NNE                      | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
| 0.4               | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 0.4               | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 0.4               | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 0.5               | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 0.5               | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 0.6               | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 0.6               | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 0.7               | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 1.0               | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 1.5               | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 2.0               | 1.7E-15                  | 4.0E-14 | 2.9E-13 | 2.9E-13 | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 2.5               | 2.9E-08                  | 2.8E-10 | 2.8E-10 | 3.6E-11 | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 3.0               | 1.1E-07                  | 1.4E-08 | 1.4E-08 | 8.5E-10 | 3.8E-10 | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      |
| 3.5               | 3.7E-07                  | 3.7E-07 | 4.9E-08 | 4.3E-09 | 1.0E-09 | 6.6E-09 | 1.0E-08 | 4.9E-08 | 1.0E-07 | 4.7E-06 | 1.2E-06 | 7.0E-08 | 1.0E-07 | 3.7E-07 | 3.7E-07 | 1.6E-06 |
| 4.0               | 6.2E-07                  | 1.0E-06 | 1.2E-07 | 3.2E-08 | 2.1E-07 | 2.2E-08 | 3.2E-08 | 1.2E-07 | 2.1E-07 | 8.9E-06 | 3.7E-06 | 3.7E-07 | 1.0E-06 | 1.0E-06 | 6.2E-07 | 2.1E-06 |
| 4.5               | 2.1E-06                  | 1.3E-06 | 2.8E-07 | 1.7E-07 | 4.8E-07 | 6.4E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 3.6E-07 | 1.0E-06 | 4.0E-06 | 4.0E-06 | 5.3E-06 | 2.1E-06 | 4.6E-06 |
| 5.0               | 3.2E-06                  | 1.6E-06 | 7.8E-07 | 2.7E-07 | 6.4E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-06 | 4.2E-06 | 4.2E-06 | 5.3E-06 | 5.3E-06 | 2.1E-06 | 4.6E-06 |
| 6.0               | 5.6E-06                  | 4.7E-06 | 1.2E-06 | 7.4E-07 | 1.0E-06 | 4.2E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-06 | 4.2E-06 | 4.2E-06 | 5.3E-06 | 5.3E-06 | 2.1E-06 | 4.6E-06 |
| 7.0               | 8.0E-06                  | 4.4E-06 | 1.6E-06 | 7.4E-07 | 1.0E-06 | 4.2E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-06 | 4.2E-06 | 4.2E-06 | 5.3E-06 | 5.3E-06 | 2.1E-06 | 4.6E-06 |
| 8.0               | 8.9E-06                  | 4.6E-06 | 1.6E-06 | 7.4E-07 | 1.0E-06 | 4.2E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-06 | 4.2E-06 | 4.2E-06 | 5.3E-06 | 5.3E-06 | 2.1E-06 | 4.6E-06 |
| 9.0               | 8.9E-06                  | 4.6E-06 | 1.6E-06 | 7.4E-07 | 1.0E-06 | 4.2E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-06 | 4.2E-06 | 4.2E-06 | 5.3E-06 | 5.3E-06 | 2.1E-06 | 4.6E-06 |
| 10.0              | 8.1E-06                  | 4.8E-06 | 1.6E-06 | 7.4E-07 | 1.0E-06 | 4.2E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-06 | 4.2E-06 | 4.2E-06 | 5.3E-06 | 5.3E-06 | 2.1E-06 | 4.6E-06 |
| 15.0              | 2.9E-06                  | 2.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 |
| 20.0              | 1.9E-06                  | 1.9E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 |
| 25.0              | 1.3E-06                  | 1.3E-06 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 | 9.1E-07 |
| 30.0              | 1.0E-06                  | 1.0E-06 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 |
| 40.0              | 6.1E-07                  | 6.1E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 | 4.6E-07 |
| 50.0              | 4.0E-07                  | 4.0E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 | 3.8E-07 |

MAX  
CONC 8.0E-06 5.5E-06 3.6E-06 1.8E-06 2.1E-06 1.4E-06 1.4E-06 1.3E-06 1.3E-06 1.3E-06 1.3E-06 1.3E-06 1.3E-06 1.3E-06 1.3E-06 1.3E-06 1.3E-06  
DIST(M) 7.0 9.0 15.0 8.0 15.0 9.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 06-14

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O DEPLETED  
STACK RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 10. MPH  
124- 147- 169-  
102- 123- 146- 188- 181

| DISTANCE<br>MILES | WIND DIRECTION RANGES |         |         |         |         |         |         |         |         |         | DOWN WIND SECTOR BEARING |         |         |         |         |         |         |    |
|-------------------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------------------|---------|---------|---------|---------|---------|---------|----|
|                   | 213                   | 214     | 215     | 216     | 217     | 218     | 219     | 220     | 221     | 222     | SSW                      | SW      | WSW     | W       | WNW     | NW      | NNW     | N  |
| .4 0.             | 0.                    | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0. |
| .4 0.             | 0.                    | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0. |
| .8 0.             | 0.                    | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0. |
| .8 0.             | 0.                    | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0. |
| .8 0.             | 0.                    | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0. |
| .6 0.             | 0.                    | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0. |
| .7 0.             | 0.                    | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0. |
| 1.0 0.            | 0.                    | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0. |
| 1.5 0.            | 0.                    | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.                       | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0. |
| 2.0 4.3E-15       | 9.3E-14               | 6.4E-13 | 6.4E-13 | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 0.      | 2.6E-14                  | 3.1E-12 | 2.8E-14 | 9.1E-14 | 3.0E-12 | 2.6E-14 | 0.      | 0. |
| 2.5 3.7E-07       | 4.2E-10               | 4.2E-10 | 8.9E-11 | 0.      | 1.6E-12 | 1.6E-12 | 1.6E-12 | 1.6E-12 | 1.6E-12 | 1.6E-12 | 1.6E-12                  | 1.6E-12 | 1.6E-12 | 1.6E-12 | 1.6E-12 | 1.6E-12 | 1.6E-12 |    |
| 3.0 1.2E-07       | 1.6E-08               | 1.6E-08 | 8.8E-10 | 0.      | 1.2E-10 | 1.2E-10 | 1.2E-10 | 1.2E-10 | 1.2E-10 | 1.2E-10 | 1.2E-10                  | 1.2E-10 | 1.2E-10 | 1.2E-10 | 1.2E-10 | 1.2E-10 | 1.2E-10 |    |
| 3.5 3.7E-07       | 3.7E-07               | 5.3E-08 | 5.1E-08 | 1.2E-08 | 7.7E-09 | 2.9E-09 | 1.6E-09 | 1.6E-09 | 1.6E-09 | 1.6E-09 | 1.6E-09                  | 1.6E-09 | 1.6E-09 | 1.6E-09 | 1.6E-09 | 1.6E-09 | 1.6E-09 |    |
| 4.0 5.9E-07       | 9.3E-07               | 1.2E-07 | 3.3E-08 | 2.1E-07 | 2.4E-08 | 3.3E-08 | 1.2E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07                  | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 |    |
| 4.5 1.8E-06       | 1.2E-06               | 2.6E-07 | 1.6E-07 | 1.6E-07 | 4.2E-07 | 5.3E-08 | 7.1E-08 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07                  | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 | 2.1E-07 |    |
| 5.0 2.6E-06       | 1.4E-06               | 6.9E-07 | 2.5E-07 | 8.7E-07 | 8.7E-07 | 8.7E-07 | 8.7E-07 | 8.7E-07 | 8.7E-07 | 8.7E-07 | 8.7E-07                  | 8.7E-07 | 8.7E-07 | 8.7E-07 | 8.7E-07 | 8.7E-07 | 8.7E-07 |    |
| 6.0 4.3E-06       | 3.4E-06               | 1.3E-06 | 9.7E-07 | 4.4E-07 | 8.4E-07 | 3.7E-07 | 6.1E-07 | 5.2E-07 | 8.4E-07 | 7.2E-06 | 3.2E-06                  | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 |    |
| 7.0 5.7E-06       | 3.4E-06               | 2.7E-06 | 9.4E-07 | 1.6E-06 | 9.4E-07 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06                  | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 |    |
| 8.0 4.8E-06       | 3.4E-06               | 2.7E-06 | 9.4E-07 | 1.6E-06 | 9.4E-07 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06                  | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 |    |
| 9.0 4.1E-06       | 3.9E-06               | 2.9E-06 | 1.2E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06                  | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 |    |
| 10.0 3.6E-06      | 3.4E-06               | 2.3E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06                  | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 |    |
| 15.0 2.0E-06      | 2.0E-06               | 1.6E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06                  | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 |    |
| 20.0 1.3E-06      | 1.3E-06               | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06                  | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 |    |
| 25.0 9.5E-07      | 9.5E-07               | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07                  | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 |    |
| 30.0 7.2E-07      | 7.2E-07               | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07                  | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 |    |
| 40.0 4.8E-07      | 4.8E-07               | 4.2E-07 | 4.2E-07 | 4.2E-07 | 4.2E-07 | 4.2E-07 | 4.2E-07 | 4.2E-07 | 4.2E-07 | 4.2E-07 | 4.2E-07                  | 4.2E-07 | 4.2E-07 | 4.2E-07 | 4.2E-07 | 4.2E-07 | 4.2E-07 |    |
| 60.0 3.0E-07      | 3.0E-07               | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07                  | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 |    |

MAX  
COHC 5.7E-06 3.9E-06 2.7E-06 1.6E-06 1.1E-06 9.9E-07 1.3E-06 9.3E-06 3.9E-06 4.1E-06 6.1E-06 6.1E-06 6.6E-06  
DIST(MI) 7.0 8.0 15.0 30.0 40.0 60.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. DQ-15

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CNT/Q DEPLETED  
STACK RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 13 MPH  
124- 147- 169-  
123 148 168 191

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0.4               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.4               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.8               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.8               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.8               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.6               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.6               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 0.7               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.0               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.8               | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.0               | 6.0E-15 | 1.3E-13 | 8.5E-13 | 8.5E-13 | 0.0     | 2.1E-12 | 2.1E-12 | 4.4E-12 | 4.1E-14 | 4.1E-14 | 3.2E-15 | 1.4E-13 | 4.6E-13 | 4.1E-14 | 0.0     | 0.0     |
| 2.8               | 3.8E-08 | 4.7E-10 | 6.7E-11 | 0.0     | 1.3E-10 | 1.3E-10 | 6.4E-10 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 2.8E-11 | 3.0E-10 | 6.4E-10 | 3.0E-10 | 8.5E-13 | 0.0     |
| 3.0               | 1.2E-07 | 1.6E-08 | 1.6E-08 | 9.1E-10 | 8.4E-10 | 1.5E-08 | 2.5E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 6.0E-08 | 4.9E-08 | 8.3E-08 | 6.0E-08 | 6.7E-11 | 8.1E-12 |
| 3.5               | 3.4E-07 | 3.4E-07 | 8.0E-08 | 4.8E-08 | 1.1E-08 | 7.5E-09 | 1.1E-08 | 5.0E-08 | 9.8E-08 | 3.5E-06 | 1.0E-06 | 2.5E-07 | 2.5E-07 | 3.8E-08 | 1.7E-07 | 6.6E-09 |
| 4.0               | 5.2E-07 | 8.2E-07 | 1.1E-07 | 3.1E-07 | 1.9E-07 | 2.2E-08 | 3.1E-08 | 1.1E-07 | 1.8E-07 | 5.8E-06 | 2.7E-06 | 3.2E-07 | 8.2E-07 | 9.8E-08 | 3.4E-07 | 1.3E-06 |
| 4.5               | 1.5E-06 | 1.0E-06 | 2.3E-07 | 1.4E-07 | 3.7E-07 | 4.8E-08 | 6.4E-08 | 1.8E-07 | 2.9E-07 | 6.3E-06 | 2.8E-06 | 6.9E-07 | 2.8E-06 | 3.6E-06 | 5.2E-07 | 1.6E-06 |
| 5.0               | 2.2E-06 | 1.2E-06 | 8.9E-07 | 2.2E-07 | 4.9E-07 | 8.5E-08 | 1.1E-07 | 2.7E-07 | 4.9E-07 | 7.1E-06 | 2.8E-06 | 6.9E-07 | 2.8E-06 | 3.6E-06 | 1.5E-06 | 3.2E-06 |
| 6.0               | 3.4E-06 | 2.9E-06 | 1.1E-06 | 7.7E-07 | 1.3E-06 | 3.1E-07 | 5.2E-07 | 4.4E-07 | 7.0E-07 | 5.6E-06 | 2.7E-06 | 2.0E-06 | 4.0E-06 | 3.7E-06 | 1.7E-06 | 5.3E-06 |
| 7.0               | 4.5E-06 | 2.7E-06 | 3.1E-06 | 1.2E-06 | 1.3E-06 | 6.7E-07 | 7.7E-07 | 5.9E-07 | 8.5E-07 | 4.5E-06 | 2.8E-06 | 3.0E-06 | 4.8E-06 | 3.7E-06 | 4.8E-06 | 4.4E-06 |
| 8.0               | 3.7E-06 | 2.7E-06 | 2.0E-06 | 9.9E-07 | 1.3E-06 | 7.7E-07 | 7.7E-07 | 6.9E-07 | 9.4E-07 | 3.7E-06 | 3.0E-06 | 3.1E-06 | 4.0E-06 | 3.7E-06 | 4.8E-06 | 4.5E-06 |
| 8.0               | 3.2E-06 | 2.7E-06 | 2.0E-06 | 9.9E-07 | 1.3E-06 | 7.7E-07 | 7.7E-07 | 6.9E-07 | 9.4E-07 | 3.7E-06 | 3.0E-06 | 3.1E-06 | 4.0E-06 | 3.7E-06 | 4.8E-06 | 4.5E-06 |
| 10.0              | 2.7E-06 | 2.7E-06 | 1.8E-06 | 1.0E-06 | 1.0E-06 | 8.3E-07 | 8.3E-07 | 7.6E-07 | 9.9E-07 | 3.2E-06 | 2.7E-06 | 2.8E-06 | 2.9E-06 | 3.2E-06 | 3.7E-06 | 3.7E-06 |
| 15.0              | 1.5E-06 | 1.5E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 8.1E-07 | 8.1E-07 | 8.0E-07 | 1.0E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 |
| 20.0              | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 8.1E-07 | 8.1E-07 | 8.0E-07 | 1.0E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 |
| 25.0              | 7.4E-07 | 7.4E-07 | 8.8E-07 | 8.8E-07 | 7.7E-07 | 6.6E-07 | 6.6E-07 | 6.5E-07 | 7.0E-07 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 |
| 30.0              | 5.6E-07 | 5.6E-07 | 5.1E-07 | 5.1E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.3E-07 | 4.5E-07 | 7.4E-07 | 7.4E-07 | 7.4E-07 | 7.4E-07 | 7.4E-07 | 7.4E-07 | 7.4E-07 |
| 40.0              | 3.5E-07 | 3.5E-07 | 3.3E-07 | 3.3E-07 | 3.0E-07 | 3.0E-07 | 3.0E-07 | 3.0E-07 | 3.1E-07 | 5.6E-07 | 5.6E-07 | 5.6E-07 | 5.6E-07 | 5.6E-07 | 5.6E-07 | 5.6E-07 |
| 50.0              | 2.4E-07 | 2.4E-07 | 2.3E-07 | 2.3E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 3.5E-07 | 3.5E-07 | 3.5E-07 | 3.5E-07 | 3.5E-07 | 3.5E-07 | 3.5E-07 |
| MAX               |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| CONC              | 4.5E-06 | 3.1E-06 | 2.2E-06 | 1.1E-06 | 1.3E-06 | 8.7E-07 | 8.7E-07 | 8.0E-07 | 1.0E-06 | 7.1E-06 | 3.1E-06 | 3.2E-06 | 4.8E-06 | 4.8E-06 | 5.3E-06 | 5.3E-06 |
| DIST(MI)          | 7.0     | 8.0     | 8.0     | 15.0    | 8.0     | 10.0    | 10.0    | 10.0    | 10.0    | 8.0     | 9.0     | 8.0     | 6.0     | 6.0     | 6.0     | 6.0     |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-16



PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
 STACK RELEASE NORMAL FLOW  
 STABILITY STABLE  
 SPEED 18. MPH

| DISTANCE<br>MILES | WIND DIRECTION RANGES |         |         |         |         |         |         |         |         |         | DOWNWIND SECTOR BEARINGS |         |         |         |         |         |         |         |         |         |         |         |         |     |
|-------------------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----|
|                   | 192-213               | 214-236 | 237-259 | 260-281 | 282-303 | 304-326 | 327-349 | 350-372 | 373-395 | 396-418 | 419-441                  | 442-464 | 465-487 | 488-510 | 511-533 | 534-556 | 557-579 | 580-602 | 603-625 | 626-648 | 649-671 | 672-694 | 695-717 |     |
| 0.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 1.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 2.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 3.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 4.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 5.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 6.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 7.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 8.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 9.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 10.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 15.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 20.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 25.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 30.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 40.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |
| 50.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                      | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0 |

MAX  
 CONC 3.6E-06 2.8E-06 1.8E-06 8.7E-07 1.1E-06 7.2E-07 7.2E-07 6.7E-07 8.4E-07 8.8E-06 2.8E-06 2.6E-06 4.0E-06 3.3E-06 4.0E-06 4.4E-06  
 DIST(MI) 7.0 9.0 15.0 11.0 10.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 09-17

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
STACK RELEASE  
STABILITY UNSTABLE  
SPEED 1. MPH  
LOW FLOW

|      |      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192- | 214- | 237- | 259- | 282- | 304- | 327- | 349- | 12- | 34- | 57- | 79- | 102- | 124- | 147- | 168- |
| 213  | 238  | 288  | 281  | 303  | 326  | 348  | 311  | 33  | 56  | 78  | 101 | 123  | 146  | 168  | 191  |

WIND DIRECTION RANGES  
DOWN WIND WIND SECTOR BEARING

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4                 | 4.2E-07 | 3.9E-07 | 3.8E-07 | 3.8E-07 | 3.9E-07 | 4.2E-07 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 |
| 5                 | 4.2E-07 | 3.9E-07 | 3.8E-07 | 3.8E-07 | 3.9E-07 | 4.2E-07 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 |
| 6                 | 4.2E-07 | 3.9E-07 | 3.8E-07 | 3.8E-07 | 3.9E-07 | 4.2E-07 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 |
| 7                 | 4.2E-07 | 3.9E-07 | 3.8E-07 | 3.8E-07 | 3.9E-07 | 4.2E-07 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 |
| 8                 | 4.2E-07 | 3.9E-07 | 3.8E-07 | 3.8E-07 | 3.9E-07 | 4.2E-07 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 |
| 9                 | 4.2E-07 | 3.9E-07 | 3.8E-07 | 3.8E-07 | 3.9E-07 | 4.2E-07 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 |
| 10                | 4.2E-07 | 3.9E-07 | 3.8E-07 | 3.8E-07 | 3.9E-07 | 4.2E-07 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 |
| 15                | 6.8E-06 | 6.7E-06 | 6.7E-06 | 6.7E-06 | 6.7E-06 | 6.7E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 |
| 20                | 4.3E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 | 4.4E-06 |
| 25                | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 |
| 30                | 2.3E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-06 |
| 35                | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 |
| 40                | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 |
| 45                | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 | 1.1E-06 |
| 50                | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 |
| 60                | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 |
| 70                | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 |
| 80                | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 | 3.7E-07 |
| 90                | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 |
| 100               | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 |
| 150               | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 |
| 200               | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 | 6.3E-08 |
| 250               | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 | 4.1E-08 |
| 300               | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 |
| 400               | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 |
| 500               | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 |

MAX  
CONC 6.8E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06 6.7E-06  
DIST(MI) 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. DG-18











PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
 STACK RELEASE  
 STABILITY STABLE  
 SPEED 3. MPH

LDM FLOW  
 147-169  
 146-181

| DISTANCE<br>MILES | WIND DIRECTION RANGES |         |         |         |         |         |         |         |         |         | DOWN WIND SECTOR BEARINGS |     |     |     |     |     |     |     |  |  |
|-------------------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------|-----|-----|-----|-----|-----|-----|-----|--|--|
|                   | 192-213               | 214-236 | 237-259 | 260-281 | 282-303 | 304-326 | 327-348 | 349-371 | 372-394 | 395-417 | SSM                       | SW  | WSW | W   | MNW | NW  | NNW | N   |  |  |
| 0.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 1.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 2.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 3.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 4.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 5.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 6.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 7.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 8.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 9.0               | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 10.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 15.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 20.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 25.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 30.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 40.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| 50.0              | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |

M/X  
 CONC 1.8E-08 1.3E-05 7.9E-06 4.2E-06 4.7E-06 3.1E-08 3.0E-06 3.6E-06 3.1E-08 1.3E-05 1.3E-06 1.9E-05 1.6E-06 1.9E-05 1.9E-06  
 DIST(MI) 7.0 9.0 8.0 18.0 10.0 15.0 15.0 10.0 5.0 8.0 8.0 6.0 8.0 7.0

TABLE NO. 00-22

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR





PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
STACK RELEASE HIGH FLOW  
STABILITY UNSTABLE  
SPEED 3 MPH

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | WSW     | W       | MNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 192-213           | 214-236 | 237-258 | 259-281 | 282-303 | 304-326 | 327-348 | 349-371 | 372-393 | 394-415 | 416-437 | 438-459 | 460-481 | 482-503 | 504-525 | 526-547 |
| 193-213           | 214-236 | 237-258 | 259-281 | 282-303 | 304-326 | 327-348 | 349-371 | 372-393 | 394-415 | 416-437 | 438-459 | 460-481 | 482-503 | 504-525 | 526-547 |

|    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4  | 1.4E-07 | 1.3E-07 | 1.2E-07 | 1.1E-07 | 1.0E-07 | 9.8E-08 | 9.6E-08 | 9.4E-08 | 9.2E-08 | 9.0E-08 | 8.8E-08 | 8.6E-08 | 8.4E-08 | 8.2E-08 | 8.0E-08 |
| 5  | 2.1E-07 | 1.9E-07 | 1.8E-07 | 1.7E-07 | 1.6E-07 | 1.5E-07 | 1.4E-07 | 1.3E-07 | 1.2E-07 | 1.1E-07 | 1.0E-07 | 9.8E-08 | 9.6E-08 | 9.4E-08 | 9.2E-08 |
| 6  | 3.2E-07 | 2.9E-07 | 2.7E-07 | 2.5E-07 | 2.3E-07 | 2.1E-07 | 1.9E-07 | 1.7E-07 | 1.5E-07 | 1.3E-07 | 1.1E-07 | 9.8E-08 | 9.6E-08 | 9.4E-08 | 9.2E-08 |
| 7  | 4.5E-07 | 4.1E-07 | 3.8E-07 | 3.5E-07 | 3.2E-07 | 2.9E-07 | 2.6E-07 | 2.3E-07 | 2.0E-07 | 1.7E-07 | 1.4E-07 | 1.1E-07 | 9.8E-08 | 9.6E-08 | 9.4E-08 |
| 8  | 6.1E-07 | 5.6E-07 | 5.2E-07 | 4.8E-07 | 4.4E-07 | 4.0E-07 | 3.6E-07 | 3.2E-07 | 2.8E-07 | 2.4E-07 | 2.0E-07 | 1.6E-07 | 1.3E-07 | 1.1E-07 | 9.8E-08 |
| 9  | 8.0E-07 | 7.4E-07 | 6.9E-07 | 6.4E-07 | 5.9E-07 | 5.4E-07 | 4.9E-07 | 4.4E-07 | 3.9E-07 | 3.4E-07 | 2.9E-07 | 2.4E-07 | 1.9E-07 | 1.5E-07 | 1.2E-07 |
| 10 | 1.0E-06 | 9.4E-07 | 8.8E-07 | 8.2E-07 | 7.6E-07 | 7.0E-07 | 6.4E-07 | 5.8E-07 | 5.2E-07 | 4.6E-07 | 4.0E-07 | 3.4E-07 | 2.8E-07 | 2.2E-07 | 1.8E-07 |
| 15 | 1.5E-06 | 1.4E-06 | 1.3E-06 | 1.2E-06 | 1.1E-06 | 1.0E-06 | 9.8E-07 | 9.6E-07 | 9.4E-07 | 9.2E-07 | 9.0E-07 | 8.8E-07 | 8.6E-07 | 8.4E-07 | 8.2E-07 |
| 20 | 2.0E-06 | 1.9E-06 | 1.8E-06 | 1.7E-06 | 1.6E-06 | 1.5E-06 | 1.4E-06 | 1.3E-06 | 1.2E-06 | 1.1E-06 | 1.0E-06 | 9.8E-07 | 9.6E-07 | 9.4E-07 | 9.2E-07 |
| 25 | 2.5E-06 | 2.4E-06 | 2.3E-06 | 2.2E-06 | 2.1E-06 | 2.0E-06 | 1.9E-06 | 1.8E-06 | 1.7E-06 | 1.6E-06 | 1.5E-06 | 1.4E-06 | 1.3E-06 | 1.2E-06 | 1.1E-06 |
| 30 | 3.0E-06 | 2.9E-06 | 2.8E-06 | 2.7E-06 | 2.6E-06 | 2.5E-06 | 2.4E-06 | 2.3E-06 | 2.2E-06 | 2.1E-06 | 2.0E-06 | 1.9E-06 | 1.8E-06 | 1.7E-06 | 1.6E-06 |
| 35 | 3.5E-06 | 3.4E-06 | 3.3E-06 | 3.2E-06 | 3.1E-06 | 3.0E-06 | 2.9E-06 | 2.8E-06 | 2.7E-06 | 2.6E-06 | 2.5E-06 | 2.4E-06 | 2.3E-06 | 2.2E-06 | 2.1E-06 |
| 40 | 4.0E-06 | 3.9E-06 | 3.8E-06 | 3.7E-06 | 3.6E-06 | 3.5E-06 | 3.4E-06 | 3.3E-06 | 3.2E-06 | 3.1E-06 | 3.0E-06 | 2.9E-06 | 2.8E-06 | 2.7E-06 | 2.6E-06 |
| 45 | 4.5E-06 | 4.4E-06 | 4.3E-06 | 4.2E-06 | 4.1E-06 | 4.0E-06 | 3.9E-06 | 3.8E-06 | 3.7E-06 | 3.6E-06 | 3.5E-06 | 3.4E-06 | 3.3E-06 | 3.2E-06 | 3.1E-06 |
| 50 | 5.0E-06 | 4.9E-06 | 4.8E-06 | 4.7E-06 | 4.6E-06 | 4.5E-06 | 4.4E-06 | 4.3E-06 | 4.2E-06 | 4.1E-06 | 4.0E-06 | 3.9E-06 | 3.8E-06 | 3.7E-06 | 3.6E-06 |

MAX  
CONC 2.3E-06 2.2E-06 2.1E-06 2.0E-06 1.9E-06 1.8E-06 1.7E-06 1.6E-06 1.5E-06 1.4E-06 1.3E-06 1.2E-06 1.1E-06 1.0E-06 9.8E-07 9.6E-07  
DIST(M) 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-25

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
STACK RELEASE HIGH FLOW  
STABILITY UNSTABLE  
SPEED 5 MPH

|      |     |     |     |     |     |     |     |     |     |    |    |     |     |     |      |      |      |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|-----|------|------|------|
| 192- | 213 | 236 | 258 | 281 | 283 | 304 | 327 | 349 | 12- | 33 | 34 | 87- | 78- | 101 | 102- | 124- | 169- |
|      |     |     |     |     |     |     |     |     |     |    |    |     |     |     |      |      |      |

| DISTANCE<br>MILES | NNE      | NE       | ENE      | E        | ESE      | SE      | SSW     | S       | SSW     | SW      | WSW     | M       | WNW     | NW      | NNW     | N       |
|-------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4                 | 2.8E-07  | 2.6E-07  | 2.4E-07  | 2.2E-07  | 2.0E-07  | 1.8E-07 | 1.6E-07 | 1.4E-07 | 1.2E-07 | 1.0E-07 | 8.0E-08 | 6.0E-08 | 4.0E-08 | 2.0E-08 | 1.0E-08 | 5.0E-09 |
| 5                 | 3.4E-07  | 3.1E-07  | 2.8E-07  | 2.5E-07  | 2.2E-07  | 1.9E-07 | 1.6E-07 | 1.3E-07 | 1.0E-07 | 8.0E-08 | 6.0E-08 | 4.0E-08 | 2.0E-08 | 1.0E-08 | 5.0E-09 | 2.5E-09 |
| 6                 | 4.0E-07  | 3.6E-07  | 3.2E-07  | 2.8E-07  | 2.4E-07  | 2.0E-07 | 1.6E-07 | 1.2E-07 | 9.0E-08 | 7.0E-08 | 5.0E-08 | 3.0E-08 | 1.5E-08 | 7.5E-09 | 3.7E-09 | 1.9E-09 |
| 7                 | 4.6E-07  | 4.1E-07  | 3.6E-07  | 3.1E-07  | 2.6E-07  | 2.1E-07 | 1.6E-07 | 1.1E-07 | 8.0E-08 | 6.0E-08 | 4.0E-08 | 2.0E-08 | 1.0E-08 | 5.0E-09 | 2.5E-09 | 1.2E-09 |
| 8                 | 5.2E-07  | 4.6E-07  | 4.0E-07  | 3.4E-07  | 2.8E-07  | 2.2E-07 | 1.6E-07 | 1.0E-07 | 7.0E-08 | 5.0E-08 | 3.0E-08 | 1.5E-08 | 7.5E-09 | 3.7E-09 | 1.9E-09 | 9.5E-10 |
| 9                 | 5.8E-07  | 5.1E-07  | 4.4E-07  | 3.7E-07  | 3.0E-07  | 2.3E-07 | 1.6E-07 | 1.0E-07 | 6.0E-08 | 4.0E-08 | 2.0E-08 | 1.0E-08 | 5.0E-09 | 2.5E-09 | 1.2E-09 | 6.0E-10 |
| 10                | 6.4E-07  | 5.6E-07  | 4.8E-07  | 4.0E-07  | 3.2E-07  | 2.4E-07 | 1.6E-07 | 1.0E-07 | 5.0E-08 | 3.0E-08 | 1.5E-08 | 7.5E-09 | 3.7E-09 | 1.9E-09 | 9.5E-10 | 4.8E-10 |
| 15                | 8.0E-07  | 7.0E-07  | 6.0E-07  | 5.0E-07  | 4.0E-07  | 3.0E-07 | 2.0E-07 | 1.0E-07 | 4.0E-08 | 2.0E-08 | 1.0E-08 | 5.0E-09 | 2.5E-09 | 1.2E-09 | 6.0E-10 | 3.0E-10 |
| 20                | 9.6E-07  | 8.4E-07  | 7.2E-07  | 6.0E-07  | 4.8E-07  | 3.6E-07 | 2.4E-07 | 1.2E-07 | 3.0E-08 | 1.5E-08 | 7.5E-09 | 3.7E-09 | 1.9E-09 | 9.5E-10 | 4.8E-10 | 2.4E-10 |
| 25                | 1.12E-06 | 9.8E-07  | 8.4E-07  | 7.0E-07  | 5.6E-07  | 4.2E-07 | 2.8E-07 | 1.4E-07 | 2.0E-08 | 1.0E-08 | 5.0E-09 | 2.5E-09 | 1.2E-09 | 6.0E-10 | 3.0E-10 | 1.5E-10 |
| 30                | 1.28E-06 | 1.1E-06  | 9.6E-07  | 8.0E-07  | 6.4E-07  | 4.8E-07 | 3.2E-07 | 1.6E-07 | 1.5E-08 | 7.5E-09 | 3.7E-09 | 1.9E-09 | 9.5E-10 | 4.8E-10 | 2.4E-10 | 1.2E-10 |
| 35                | 1.44E-06 | 1.26E-06 | 1.08E-06 | 9.0E-07  | 7.2E-07  | 5.4E-07 | 3.6E-07 | 1.8E-07 | 1.2E-08 | 6.0E-09 | 3.0E-09 | 1.5E-09 | 7.5E-10 | 3.7E-10 | 1.9E-10 | 9.5E-11 |
| 40                | 1.6E-06  | 1.4E-06  | 1.2E-06  | 1.0E-06  | 8.0E-07  | 6.0E-07 | 4.0E-07 | 2.0E-07 | 1.0E-08 | 5.0E-09 | 2.5E-09 | 1.2E-09 | 6.0E-10 | 3.0E-10 | 1.5E-10 | 7.5E-11 |
| 45                | 1.76E-06 | 1.56E-06 | 1.36E-06 | 1.16E-06 | 9.6E-07  | 7.6E-07 | 5.6E-07 | 3.6E-07 | 8.0E-08 | 4.0E-08 | 2.0E-08 | 1.0E-08 | 5.0E-09 | 2.5E-09 | 1.2E-09 | 6.0E-10 |
| 50                | 1.92E-06 | 1.72E-06 | 1.52E-06 | 1.32E-06 | 1.12E-06 | 9.2E-07 | 7.2E-07 | 5.2E-07 | 6.0E-08 | 3.0E-08 | 1.5E-08 | 7.5E-09 | 3.7E-09 | 1.9E-09 | 9.5E-10 | 4.8E-10 |

|          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MAX      | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 |
| CONC     | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 |
| DIST(MI) | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     | 1.0     |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. 00-26



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
STACK RELEASE HIGH FLOW  
STABILITY STABLE  
SPEED 1. MPH

| DISTANCE<br>MILES                    | NNE     | NE      | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | MNW     | NW      | MNW     | N       |
|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 182-                                 | 214-    | 237-    | 208-    | 282-    | 304-    | 327-    | 348-    | 12-     | 34-     | 57-     | 78-     | 102-    | 124-    | 147-    | 169-    |
| 213                                  | 236     | 258     | 281     | 303     | 326     | 348     | 11      | 33      | 56      | 78      | 101     | 123     | 146     | 168     | 191     |
| ..... WIND DIRECTION RANGES .....    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| ..... DOWN WIND SECTOR BEARING ..... |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 0.4                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 4.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 4.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 8.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 8.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 8.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 8.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 7.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.5                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.5                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 3.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 4.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 4.5                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 5.0                                  | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 8.0                                  | 3.7E-18 | 1.4E-13 | 1.8E-18 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 7.0                                  | 1.4E-11 | 1.4E-13 | 1.8E-18 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 8.0                                  | 1.6E-10 | 5.9E-12 | 1.8E-12 | 3.4E-15 | 1.9E-14 | 1.9E-14 | 1.3E-14 | 4.2E-14 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 9.0                                  | 3.2E-08 | 8.7E-10 | 2.1E-11 | 8.8E-13 | 4.6E-13 | 4.6E-13 | 3.3E-13 | 8.8E-13 | 4.7E-09 | 8.7E-10 | 2.2E-10 | 3.4E-10 | 1.7E-08 | 5.8E-08 | 8.8E-08 |
| 10.0                                 | 7.4E-08 | 2.3E-09 | 1.4E-10 | 8.8E-12 | 2.4E-11 | 5.0E-12 | 8.8E-12 | 8.8E-12 | 1.4E-08 | 3.1E-09 | 9.6E-09 | 2.3E-09 | 4.3E-08 | 1.2E-07 | 1.2E-07 |
| 15.0                                 | 6.2E-07 | 8.9E-08 | 1.8E-08 | 8.3E-08 | 2.8E-08 | 2.8E-08 | 2.4E-08 | 3.9E-08 | 2.8E-07 | 1.3E-07 | 2.4E-07 | 1.3E-07 | 4.6E-07 | 8.3E-07 | 8.3E-07 |
| 20.0                                 | 1.3E-06 | 4.7E-07 | 1.3E-07 | 1.3E-07 | 3.7E-08 | 3.7E-08 | 3.3E-08 | 4.8E-08 | 7.2E-07 | 8.0E-07 | 7.0E-07 | 1.0E-06 | 1.1E-06 | 1.6E-06 | 1.6E-06 |
| 25.0                                 | 1.8E-06 | 8.8E-07 | 3.3E-07 | 2.0E-07 | 1.3E-07 | 1.3E-07 | 1.2E-07 | 1.5E-07 | 1.4E-06 | 1.4E-06 | 3.0E-06 | 1.8E-06 | 1.8E-06 | 2.1E-06 | 2.1E-06 |
| 30.0                                 | 2.1E-06 | 1.1E-06 | 5.8E-07 | 3.8E-07 | 2.7E-07 | 2.7E-07 | 2.6E-07 | 3.1E-07 | 1.8E-06 | 1.7E-06 | 3.0E-06 | 2.1E-06 | 1.8E-06 | 2.3E-06 | 2.3E-06 |
| 40.0                                 | 3.3E-06 | 2.1E-06 | 8.6E-07 | 6.8E-07 | 5.4E-07 | 5.4E-07 | 5.2E-07 | 5.9E-07 | 1.7E-06 | 3.2E-06 | 2.7E-06 | 2.8E-06 | 1.8E-06 | 2.2E-06 | 4.7E-06 |
| 50.0                                 | 2.5E-06 | 1.8E-06 | 8.6E-07 | 8.0E-07 | 6.8E-07 | 6.8E-07 | 6.7E-07 | 7.2E-07 | 1.8E-06 | 2.8E-06 | 2.2E-06 | 3.1E-06 | 1.7E-06 | 1.8E-06 | 3.3E-06 |

MAX  
 COMC 3.3E-06 2.1E-06 8.6E-07 8.0E-07 6.8E-07 6.8E-07 6.7E-07 7.3E-07 1.7E-06 3.2E-06 3.0E-06 3.1E-06 1.8E-06 2.3E-06 4.7E-06  
 DIST(MI)40.0 40.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0 40.0 40.0 40.0 50.0 40.0 40.0 40.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR  
 TABLE NO. DQ-27















PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
 VENT RELEASE NORMAL FLOW  
 STABILITY UNSTABLE  
 SPEED 5 MPH

|      |      |      |      |     |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|-----|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192- | 214- | 237- | 258- | 281 | 282- | 304- | 327- | 348- | 12- | 34- | 57- | 78- | 102- | 124- | 147- | 169- |
| 213  | 238  | 258  | 281  | 303 | 326  | 348  | 348  | 348  | 33  | 36  | 78  | 101 | 123  | 146  | 168  | 191  |

| DISTANCE<br>MILES | NNE      | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2                 | 3.9E-06* | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 |
| 4                 | 7.8E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 6                 | 3.9E-06  | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 |
| 8                 | 7.0E-06  | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 |
| 10                | 6.4E-06  | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 | 6.4E-06 |
| 15                | 6.1E-06  | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 |
| 20                | 5.9E-06  | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 | 5.9E-06 |
| 30                | 5.7E-06  | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 |
| 40                | 5.6E-06  | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 |
| 50                | 5.0E-06  | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 |
| 70                | 4.8E-06  | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 |
| 100               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 150               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 200               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 250               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 300               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 400               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 500               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 600               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 700               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 800               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 900               | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 1000              | 4.7E-06  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |

|          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MAX      | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 |
| COMC     | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 |
| DIST(MI) | .4      | .4      | .4      | .4      | .4      | .4      | .4      | .4      | .4      | .4      | .4      | .4      | .4      | .4      | .4      | .4      |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-3

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O VENT RELEASE NORMAL FLOW STABILITY UNSTABLE SPEED 7. MPH

| 182-<br>213           | 214-<br>238           | 237-<br>258           | 289-<br>281           | 283-<br>303           | 304-<br>326           | 327-<br>348           | 349-<br>11            | 34-<br>86             | 57-<br>78             | 79-<br>101            | 102-<br>123           | 124-<br>146           | 147-<br>168           | 169-<br>181           |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES | WIND DIRECTION RANGES |
| SSW                   | SSE                   | ESE                   | E                     | ESE                   | SE                    | SSE                   | S                     | SSW                   | SW                    | WSW                   | W                     | MNW                   | NW                    | NNW                   |
| 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   | 0.0                   |
| 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   | 0.1                   |
| 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   | 0.2                   |
| 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   | 0.3                   |
| 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   | 0.4                   |
| 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   |
| 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   | 0.6                   |
| 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   | 0.7                   |
| 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   | 0.8                   |
| 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   | 0.9                   |
| 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   | 1.0                   |
| 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   | 1.1                   |
| 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   | 1.2                   |
| 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   | 1.3                   |
| 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.4                   |
| 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   | 1.5                   |
| 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   | 1.6                   |
| 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   | 1.7                   |
| 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   | 1.8                   |
| 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   |
| 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   | 2.0                   |
| 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   | 2.1                   |
| 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   |
| 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   | 2.3                   |
| 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   | 2.4                   |
| 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   | 2.5                   |
| 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   | 2.6                   |
| 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   | 2.7                   |
| 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   |
| 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   | 2.9                   |
| 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   |
| 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   | 3.1                   |
| 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   | 3.2                   |
| 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   | 3.3                   |
| 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   | 3.4                   |
| 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   | 3.5                   |
| 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   | 3.6                   |
| 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   | 3.7                   |
| 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   | 3.8                   |
| 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   | 3.9                   |
| 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   | 4.0                   |
| 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   | 4.1                   |
| 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   |
| 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   | 4.3                   |
| 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   | 4.4                   |
| 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   | 4.5                   |
| 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   | 4.6                   |
| 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   | 4.7                   |
| 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   | 4.8                   |
| 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   | 4.9                   |
| 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   | 5.0                   |

MAX  
CDMC 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06 5.6E-06  
DIST(M) .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-4

PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
 VENT RELEASE NORMAL FLOW  
 STABILITY UNSTABLE  
 SPEED 8 MPH

| 192- | 214- | 237- | 259- | 282- | 304- | 327- | 348- | 12- | 34- | 79- | 102- | 124- | 147- | 169- |
|------|------|------|------|------|------|------|------|-----|-----|-----|------|------|------|------|
| 213  | 236  | 258  | 281  | 303  | 326  | 348  | 348  | 11  | 33  | 86  | 101  | 123  | 146  | 181  |

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2                 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 2.2E-05 | 2.4E-05 | 2.6E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 1.8E-05 |
| 3                 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 2.0E-05 | 2.2E-05 | 2.4E-05 | 2.6E-05 | 2.6E-05 | 2.6E-05 | 2.6E-05 | 2.6E-05 | 1.4E-05 |
| 4                 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.7E-05 | 1.9E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 1.1E-05 |
| 5                 | 8.2E-06 | 8.2E-06 | 8.2E-06 | 8.2E-06 | 8.2E-06 | 8.2E-06 | 8.2E-06 | 1.2E-05 | 1.4E-05 | 1.6E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 8.2E-06 |
| 6                 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 9.1E-06 | 1.0E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 6.1E-06 |
| 7                 | 4.9E-06 | 4.9E-06 | 4.9E-06 | 4.9E-06 | 4.9E-06 | 4.9E-06 | 4.9E-06 | 7.1E-06 | 8.0E-06 | 8.9E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 4.9E-06 |
| 8                 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 5.1E-06 | 5.9E-06 | 6.7E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 3.8E-06 |
| 9                 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 3.3E-06 | 3.9E-06 | 4.5E-06 | 5.1E-06 | 5.1E-06 | 5.1E-06 | 5.1E-06 | 5.1E-06 | 2.7E-06 |
| 10                | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 2.2E-06 | 2.6E-06 | 3.0E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 1.6E-06 |
| 15                | 7.1E-07 | 7.1E-07 | 7.1E-07 | 7.1E-07 | 7.1E-07 | 7.1E-07 | 7.1E-07 | 1.1E-06 | 1.3E-06 | 1.5E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 7.1E-07 |
| 20                | 4.8E-07 | 4.8E-07 | 4.8E-07 | 4.8E-07 | 4.8E-07 | 4.8E-07 | 4.8E-07 | 7.4E-07 | 8.9E-07 | 1.0E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 4.8E-07 |
| 25                | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 5.6E-07 | 6.7E-07 | 7.8E-07 | 9.0E-07 | 9.0E-07 | 9.0E-07 | 9.0E-07 | 9.0E-07 | 3.6E-07 |
| 30                | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 2.5E-07 | 4.0E-07 | 4.8E-07 | 5.7E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 2.5E-07 |
| 35                | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 2.9E-07 | 3.5E-07 | 4.1E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 1.8E-07 |
| 40                | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 2.1E-07 | 2.5E-07 | 2.9E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 1.3E-07 |
| 45                | 9.8E-08 | 9.8E-08 | 9.8E-08 | 9.8E-08 | 9.8E-08 | 9.8E-08 | 9.8E-08 | 1.5E-07 | 1.8E-07 | 2.1E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 9.8E-08 |
| 50                | 7.1E-08 | 7.1E-08 | 7.1E-08 | 7.1E-08 | 7.1E-08 | 7.1E-08 | 7.1E-08 | 1.1E-07 | 1.3E-07 | 1.5E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 1.7E-07 | 7.1E-08 |

MAX  
 CONC 1.8E-05 1.8E-05 1.8E-05 1.8E-05 1.8E-05 1.8E-05 1.8E-05 1.8E-05 2.2E-05 2.4E-05 2.6E-05 2.8E-05 2.8E-05 2.8E-05 2.8E-05 2.8E-05 1.8E-05  
 DIST(MI) .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2

TABLE NO. V-8

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
VENT RELEASE NORMAL FLOW  
STABILITY UNSTABLE  
SPEED 10. MPH

|      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |     |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 192- | 214- | 237- | 259- | 282- | 304- | 327- | 348- | 12- | 34- | 57- | 78- | 101 | 123 | 146 | 168 | 191 |
| 213  | 236  | 258  | 281  | 303  | 326  | 348  | 348  | 11  | 33  | 58  | 78  | 101 | 123 | 146 | 168 | 191 |

| ***** WIND DIRECTION RANGES *****    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ***** DOWN WIND SECTOR BEARING ***** |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| DISTANCE                             | MNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
| 2                                    | 1.2E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.6E-05 | 1.8E-05 | 2.0E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 1.3E-05 | 1.3E-05 |
| 3                                    | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 4                                    | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 5                                    | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 6                                    | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 7                                    | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 8                                    | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 9                                    | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 10                                   | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 15                                   | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 20                                   | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 25                                   | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 30                                   | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 40                                   | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |
| 50                                   | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.8E-05 | 1.9E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 1.2E-05 | 1.2E-05 |

|          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MAX      | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.6E-05 | 1.8E-05 | 2.0E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 1.3E-05 | 1.3E-05 |
| DIST(MI) | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY V. LUE IN EACH SECTOR

TABLE NO. V-6







PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
VENT RELEASE NORMAL FLOW  
STABILITY NEUTRAL  
SPEED 18 MPH

|      |      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192- | 214- | 237- | 259- | 282- | 304- | 327- | 348- | 12- | 34- | 57- | 78- | 102- | 124- | 147- | 169- |
| 213  | 236  | 258  | 281  | 303  | 326  | 348  | 368  | 33  | 56  | 78  | 101 | 123  | 146  | 168  | 191  |

| DISTANCE<br>MILES | ENE      | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2                 | 1.8E-08* | 1.8E-05 | 1.8E-05 | 1.8E-05 | 2.1E-05 | 2.6E-05 | 3.5E-05 | 4.1E-05 | 5.0E-05 | 6.0E-05 | 8.0E-05 | 9.0E-05 | 1.0E-04 | 1.0E-04 |
| 3                 | 1.7E-05  | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.9E-05 | 2.4E-05 | 3.2E-05 | 4.2E-05 | 4.8E-05 | 5.8E-05 | 7.8E-05 | 8.8E-05 | 1.0E-04 | 1.0E-04 |
| 4                 | 3.3E-05  | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.5E-05 | 4.0E-05 | 5.0E-05 | 6.0E-05 | 7.0E-05 | 9.0E-05 | 1.0E-04 | 1.1E-04 | 1.2E-04 | 1.2E-04 |
| 5                 | 7.4E-06  | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 |
| 6                 | 8.8E-06  | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 |
| 7                 | 5.7E-06  | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 |
| 8                 | 6.3E-06  | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 |
| 9                 | 5.6E-06  | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 |
| 10                | 3.9E-06  | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 |
| 15                | 2.4E-06  | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 |
| 20                | 1.8E-06  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 |
| 25                | 1.4E-06  | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 |
| 30                | 1.0E-06  | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 |
| 40                | 1.8E-08  | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 |
| 50                | 1.3E-08  | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 |

MAX  
CONC 1.8E-05 1.8E-05 1.8E-05 1.8E-05 1.8E-05 3.2E-05 3.2E-05 3.2E-05 3.2E-05 3.2E-05 3.2E-05 3.2E-05 3.2E-05 3.2E-05 3.2E-05 3.2E-05  
DIST(M) .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V- B



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
VENT RELEASE NORMAL FLOW  
STABILITY NEUTRAL  
SPEED 22 MPH

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 182 | 214 | 237 | 259 | 282 | 304 | 326 | 348 | 370 | 392 | 414 | 436 | 458 | 480 | 502 | 524 | 546 | 568 | 590 | 612 | 634 | 656 | 678 | 700 | 722 | 744 | 766 | 788 | 810 | 832 | 854 | 876 | 898 | 920 | 942 | 964 | 986 | 1008 | 1030 | 1052 | 1074 | 1096 | 1118 | 1140 | 1162 | 1184 | 1206 | 1228 | 1250 | 1272 | 1294 | 1316 | 1338 | 1360 | 1382 | 1404 | 1426 | 1448 | 1470 | 1492 | 1514 | 1536 | 1558 | 1580 | 1602 | 1624 | 1646 | 1668 | 1690 | 1712 | 1734 | 1756 | 1778 | 1800 | 1822 | 1844 | 1866 | 1888 | 1910 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|

| DISTANCE<br>MILES | NNE     | NE      | E       | ESE     | SE      | SSE     | S       | SSW     | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1.0               | 1.5E-05 | 1.4E-05 | 1.3E-05 | 1.2E-05 | 1.1E-05 | 1.0E-05 | 9.5E-06 | 9.0E-06 | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 |
| 2.0               | 1.4E-05 | 1.3E-05 | 1.2E-05 | 1.1E-05 | 1.0E-05 | 9.5E-06 | 9.0E-06 | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 | 5.5E-06 |
| 3.0               | 1.3E-05 | 1.2E-05 | 1.1E-05 | 1.0E-05 | 9.5E-06 | 9.0E-06 | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 | 5.5E-06 | 5.0E-06 |
| 4.0               | 1.2E-05 | 1.1E-05 | 1.0E-05 | 9.5E-06 | 9.0E-06 | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 | 5.5E-06 | 5.0E-06 | 4.5E-06 |
| 5.0               | 1.1E-05 | 1.0E-05 | 9.5E-06 | 9.0E-06 | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 | 5.5E-06 | 5.0E-06 | 4.5E-06 | 4.0E-06 |
| 6.0               | 1.0E-05 | 9.5E-06 | 9.0E-06 | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 | 5.5E-06 | 5.0E-06 | 4.5E-06 | 4.0E-06 | 3.5E-06 |
| 7.0               | 9.5E-06 | 9.0E-06 | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 | 5.5E-06 | 5.0E-06 | 4.5E-06 | 4.0E-06 | 3.5E-06 | 3.0E-06 |
| 8.0               | 9.0E-06 | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 | 5.5E-06 | 5.0E-06 | 4.5E-06 | 4.0E-06 | 3.5E-06 | 3.0E-06 | 2.5E-06 |
| 9.0               | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 | 5.5E-06 | 5.0E-06 | 4.5E-06 | 4.0E-06 | 3.5E-06 | 3.0E-06 | 2.5E-06 | 2.0E-06 |
| 10.0              | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 | 5.5E-06 | 5.0E-06 | 4.5E-06 | 4.0E-06 | 3.5E-06 | 3.0E-06 | 2.5E-06 | 2.0E-06 | 1.5E-06 |
| 15.0              | 6.5E-06 | 6.0E-06 | 5.5E-06 | 5.0E-06 | 4.5E-06 | 4.0E-06 | 3.5E-06 | 3.0E-06 | 2.5E-06 | 2.0E-06 | 1.5E-06 | 1.0E-06 | 5.0E-07 | 0.0E-07 |
| 20.0              | 5.0E-06 | 4.5E-06 | 4.0E-06 | 3.5E-06 | 3.0E-06 | 2.5E-06 | 2.0E-06 | 1.5E-06 | 1.0E-06 | 5.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 |
| 25.0              | 3.5E-06 | 3.0E-06 | 2.5E-06 | 2.0E-06 | 1.5E-06 | 1.0E-06 | 5.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 |
| 30.0              | 2.0E-06 | 1.5E-06 | 1.0E-06 | 5.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 |
| 40.0              | 1.0E-06 | 5.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 |
| 50.0              | 5.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 | 0.0E-07 |

|          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MAX      | 1.5E-05 | 1.4E-05 | 1.3E-05 | 1.2E-05 | 1.1E-05 | 1.0E-05 | 9.5E-06 | 9.0E-06 | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 |
| CONC     | 1.5E-05 | 1.4E-05 | 1.3E-05 | 1.2E-05 | 1.1E-05 | 1.0E-05 | 9.5E-06 | 9.0E-06 | 8.5E-06 | 8.0E-06 | 7.5E-06 | 7.0E-06 | 6.5E-06 | 6.0E-06 |
| DIST(MI) | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      |

TABLE NO. V-10

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
VENT RELEASE NORMAL FLOW  
STABILITY NEUTRAL  
SPEED 27 MPH

WIND DIRECTION RANGES  
34- 37- 79- 102-  
12- 34- 87- 123-  
33 58 78 101

213- 236 237- 259- 282- 304- 327- 348-  
288 281 303 326 348 11 33 58 78 101

| DISTANCE<br>MILES | N        | NE       | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW      | N       |
|-------------------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| 2                 | 1.2E-05* | 1.2E-05* | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.5E-05 | 2.0E-05 | 2.7E-05 | 3.1E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 1.2E-05  | 1.2E-05 |
| 3                 | 1.1E-05  | 1.1E-05  | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.4E-05 | 1.9E-05 | 2.6E-05 | 3.0E-05 | 3.2E-05 | 3.2E-05 | 3.2E-05 | 3.2E-05 | 1.1E-05* | 1.1E-05 |
| 4                 | 8.7E-06  | 8.7E-06  | 8.7E-06 | 8.7E-06 | 8.7E-06 | 1.1E-05 | 1.5E-05 | 2.0E-05 | 2.3E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 8.7E-06  | 8.7E-06 |
| 5                 | 8.5E-06  | 8.5E-06  | 8.5E-06 | 8.5E-06 | 8.5E-06 | 1.1E-05 | 1.5E-05 | 2.0E-05 | 2.3E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 8.5E-06  | 8.5E-06 |
| 6                 | 8.2E-06  | 8.2E-06  | 8.2E-06 | 8.2E-06 | 8.2E-06 | 1.0E-05 | 1.4E-05 | 1.9E-05 | 2.2E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 8.2E-06  | 8.2E-06 |
| 7                 | 8.0E-06  | 8.0E-06  | 8.0E-06 | 8.0E-06 | 8.0E-06 | 1.0E-05 | 1.4E-05 | 1.9E-05 | 2.2E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 8.0E-06  | 8.0E-06 |
| 8                 | 7.8E-06  | 7.8E-06  | 7.8E-06 | 7.8E-06 | 7.8E-06 | 9.8E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 7.8E-06  | 7.8E-06 |
| 9                 | 7.6E-06  | 7.6E-06  | 7.6E-06 | 7.6E-06 | 7.6E-06 | 9.6E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 7.6E-06  | 7.6E-06 |
| 10                | 7.4E-06  | 7.4E-06  | 7.4E-06 | 7.4E-06 | 7.4E-06 | 9.4E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 7.4E-06  | 7.4E-06 |
| 11                | 7.2E-06  | 7.2E-06  | 7.2E-06 | 7.2E-06 | 7.2E-06 | 9.2E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 7.2E-06  | 7.2E-06 |
| 12                | 7.0E-06  | 7.0E-06  | 7.0E-06 | 7.0E-06 | 7.0E-06 | 9.0E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 7.0E-06  | 7.0E-06 |
| 13                | 6.8E-06  | 6.8E-06  | 6.8E-06 | 6.8E-06 | 6.8E-06 | 8.8E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 6.8E-06  | 6.8E-06 |
| 14                | 6.6E-06  | 6.6E-06  | 6.6E-06 | 6.6E-06 | 6.6E-06 | 8.6E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 6.6E-06  | 6.6E-06 |
| 15                | 6.4E-06  | 6.4E-06  | 6.4E-06 | 6.4E-06 | 6.4E-06 | 8.4E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 6.4E-06  | 6.4E-06 |
| 16                | 6.2E-06  | 6.2E-06  | 6.2E-06 | 6.2E-06 | 6.2E-06 | 8.2E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 6.2E-06  | 6.2E-06 |
| 17                | 6.0E-06  | 6.0E-06  | 6.0E-06 | 6.0E-06 | 6.0E-06 | 8.0E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 6.0E-06  | 6.0E-06 |
| 18                | 5.8E-06  | 5.8E-06  | 5.8E-06 | 5.8E-06 | 5.8E-06 | 7.8E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 5.8E-06  | 5.8E-06 |
| 19                | 5.6E-06  | 5.6E-06  | 5.6E-06 | 5.6E-06 | 5.6E-06 | 7.6E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 5.6E-06  | 5.6E-06 |
| 20                | 5.4E-06  | 5.4E-06  | 5.4E-06 | 5.4E-06 | 5.4E-06 | 7.4E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 5.4E-06  | 5.4E-06 |
| 21                | 5.2E-06  | 5.2E-06  | 5.2E-06 | 5.2E-06 | 5.2E-06 | 7.2E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 5.2E-06  | 5.2E-06 |
| 22                | 5.0E-06  | 5.0E-06  | 5.0E-06 | 5.0E-06 | 5.0E-06 | 7.0E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 5.0E-06  | 5.0E-06 |
| 23                | 4.8E-06  | 4.8E-06  | 4.8E-06 | 4.8E-06 | 4.8E-06 | 6.8E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 4.8E-06  | 4.8E-06 |
| 24                | 4.6E-06  | 4.6E-06  | 4.6E-06 | 4.6E-06 | 4.6E-06 | 6.6E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 4.6E-06  | 4.6E-06 |
| 25                | 4.4E-06  | 4.4E-06  | 4.4E-06 | 4.4E-06 | 4.4E-06 | 6.4E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 4.4E-06  | 4.4E-06 |
| 26                | 4.2E-06  | 4.2E-06  | 4.2E-06 | 4.2E-06 | 4.2E-06 | 6.2E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 4.2E-06  | 4.2E-06 |
| 27                | 4.0E-06  | 4.0E-06  | 4.0E-06 | 4.0E-06 | 4.0E-06 | 6.0E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 4.0E-06  | 4.0E-06 |
| 28                | 3.8E-06  | 3.8E-06  | 3.8E-06 | 3.8E-06 | 3.8E-06 | 5.8E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 3.8E-06  | 3.8E-06 |
| 29                | 3.6E-06  | 3.6E-06  | 3.6E-06 | 3.6E-06 | 3.6E-06 | 5.6E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 3.6E-06  | 3.6E-06 |
| 30                | 3.4E-06  | 3.4E-06  | 3.4E-06 | 3.4E-06 | 3.4E-06 | 5.4E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 3.4E-06  | 3.4E-06 |
| 31                | 3.2E-06  | 3.2E-06  | 3.2E-06 | 3.2E-06 | 3.2E-06 | 5.2E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 3.2E-06  | 3.2E-06 |
| 32                | 3.0E-06  | 3.0E-06  | 3.0E-06 | 3.0E-06 | 3.0E-06 | 5.0E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 3.0E-06  | 3.0E-06 |
| 33                | 2.8E-06  | 2.8E-06  | 2.8E-06 | 2.8E-06 | 2.8E-06 | 4.8E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.8E-06  | 2.8E-06 |
| 34                | 2.6E-06  | 2.6E-06  | 2.6E-06 | 2.6E-06 | 2.6E-06 | 4.6E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.6E-06  | 2.6E-06 |
| 35                | 2.4E-06  | 2.4E-06  | 2.4E-06 | 2.4E-06 | 2.4E-06 | 4.4E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.4E-06  | 2.4E-06 |
| 36                | 2.2E-06  | 2.2E-06  | 2.2E-06 | 2.2E-06 | 2.2E-06 | 4.2E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.2E-06  | 2.2E-06 |
| 37                | 2.0E-06  | 2.0E-06  | 2.0E-06 | 2.0E-06 | 2.0E-06 | 4.0E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.0E-06  | 2.0E-06 |
| 38                | 1.8E-06  | 1.8E-06  | 1.8E-06 | 1.8E-06 | 1.8E-06 | 3.8E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 1.8E-06  | 1.8E-06 |
| 39                | 1.6E-06  | 1.6E-06  | 1.6E-06 | 1.6E-06 | 1.6E-06 | 3.6E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 1.6E-06  | 1.6E-06 |
| 40                | 1.4E-06  | 1.4E-06  | 1.4E-06 | 1.4E-06 | 1.4E-06 | 3.4E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 1.4E-06  | 1.4E-06 |
| 41                | 1.2E-06  | 1.2E-06  | 1.2E-06 | 1.2E-06 | 1.2E-06 | 3.2E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 1.2E-06  | 1.2E-06 |
| 42                | 1.0E-06  | 1.0E-06  | 1.0E-06 | 1.0E-06 | 1.0E-06 | 3.0E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 1.0E-06  | 1.0E-06 |
| 43                | 8.8E-07  | 8.8E-07  | 8.8E-07 | 8.8E-07 | 8.8E-07 | 2.8E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 8.8E-07  | 8.8E-07 |
| 44                | 8.6E-07  | 8.6E-07  | 8.6E-07 | 8.6E-07 | 8.6E-07 | 2.6E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 8.6E-07  | 8.6E-07 |
| 45                | 8.4E-07  | 8.4E-07  | 8.4E-07 | 8.4E-07 | 8.4E-07 | 2.4E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 8.4E-07  | 8.4E-07 |
| 46                | 8.2E-07  | 8.2E-07  | 8.2E-07 | 8.2E-07 | 8.2E-07 | 2.2E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 8.2E-07  | 8.2E-07 |
| 47                | 8.0E-07  | 8.0E-07  | 8.0E-07 | 8.0E-07 | 8.0E-07 | 2.0E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 8.0E-07  | 8.0E-07 |
| 48                | 7.8E-07  | 7.8E-07  | 7.8E-07 | 7.8E-07 | 7.8E-07 | 1.8E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 7.8E-07  | 7.8E-07 |
| 49                | 7.6E-07  | 7.6E-07  | 7.6E-07 | 7.6E-07 | 7.6E-07 | 1.6E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 7.6E-07  | 7.6E-07 |
| 50                | 7.4E-07  | 7.4E-07  | 7.4E-07 | 7.4E-07 | 7.4E-07 | 1.4E-06 | 1.3E-05 | 1.8E-05 | 2.1E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 7.4E-07  | 7.4E-07 |

MAX  
CONC 1.2E-05 1.2E-05 1.2E-05 1.2E-05 1.2E-05 1.2E-05 1.2E-05 2.2E-05 2.7E-05 3.1E-05 3.3E-05 3.3E-05 3.3E-05 3.3E-05 1.2E-05 1.2E-05  
DIST(MI) .2 .2 .2 .2 .2 .2 .2 .3 .3 .3 .3 .3 .3 .3 .2 .2

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-11







PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
VENT RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 8. MPH

|      |      |      |      |      |      |     |      |      |     |      |      |      |      |     |     |     |     |
|------|------|------|------|------|------|-----|------|------|-----|------|------|------|------|-----|-----|-----|-----|
| 192- | 214- | 237- | 288- | 282- | 304- | 12- | 34-  | 87-  | 79- | 102- | 124- | 147- | 169- |     |     |     |     |
| 213  | 236  | 258  | 281  | 303  | 328  | 348 | 327- | 349- | 11  | 32   | 56   | 78   | 101  | 123 | 146 | 168 | 191 |

| DISTANCE<br>MILES | DOWN WIND SECTOR BEARING |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------------|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                   | NNE                      | NE  | ENE | E   | ESE | SE  | SSE | S   | SSW | SW  | MSW | W   | WNW | NW  | NNW | N   |     |
| 2.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9.0               | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 36.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 37.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 39.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 41.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 42.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 43.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 44.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 45.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 46.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 47.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 49.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50.0              | 0.0                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

MAX  
CONC 6.9E-05 4.1E-05 5.2E-05 2.9E-05 2.8E-05 2.7E-05 4.7E-05 7.4E-05 9.5E-05 7.4E-05 6.0E-05 7.4E-05 9.5E-05 7.4E-05 4.1E-05 4.1E-05  
DIST(MI) 2.0 3.0 2.5 2.0 4.0 3.8 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-14







PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
VENT STABILITY NORMAL FLOW  
RELEASE STABLE  
SPEED 10. MPH

| 192-<br>213 | 214-<br>236 | 237-<br>268 | 269-<br>281 | 282-<br>303 | 304-<br>326 | 327-<br>348 | 349-<br>366 | 37-<br>56 | 57-<br>78 | 79-<br>101 | 102-<br>123 | 124-<br>146 | 147-<br>169 | 169-<br>191 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|------------|-------------|-------------|-------------|-------------|
| .....       | .....       | .....       | .....       | .....       | .....       | .....       | .....       | .....     | .....     | .....      | .....       | .....       | .....       | .....       |
| .....       | .....       | .....       | .....       | .....       | .....       | .....       | .....       | .....     | .....     | .....      | .....       | .....       | .....       | .....       |

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2.6               | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 |
| 2.6               | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   | 9E-05   |
| 3.7               | 8E-05   | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 |
| 4.7               | 8E-05   | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 |
| 5.7               | 8E-05   | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 |
| 6.6               | 7E-05   | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 | 6.7E-05 |
| 6.6               | 5E-05   | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 |
| 6.6               | 3E-05   | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 |
| 6.6               | 2E-05   | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 | 6.2E-05 |
| 7.5               | 6E-05   | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 | 6.6E-05 |
| 7.5               | 5E-05   | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 | 6.5E-05 |
| 7.5               | 4E-05   | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 |
| 1.0               | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 |
| 1.8               | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 |
| 2.0               | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 |
| 2.5               | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 | 2.8E-05 |
| 3.0               | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 |
| 3.5               | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 |
| 4.0               | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| 4.5               | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 |
| 5.0               | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 |
| 5.0               | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 |
| 7.0               | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 |
| 8.0               | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 |
| 9.0               | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 |
| 10.0              | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 |
| 15.0              | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 |
| 20.0              | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 |
| 25.0              | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 |
| 30.0              | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 | 8.9E-07 |
| 40.0              | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 | 5.9E-07 |
| 50.0              | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 |

| MAX<br>CONC | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 | 7.8E-05 |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| DIST(MI)    | .3      | .3      | .3      | .3      | .3      | .3      | .3      | .3      | .3      | .3      | .3      | .3      | .3      | .3      | .3      | .3      |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-17







PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q VENT RELEASE LOW FLOW  
 STABILITY UNSTABLE  
 SPEED 3 MPH

192- 214- 237- 259- 282- 304- 327- 348- 34- 57- 70- 102- 124- 147- 168-  
 213 236 258 281 303 328 348 11 33 56 78 101 123 146 168 181

WIND DIRECTION RANGES

DOWN WIND SECTOR BEARING

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | MNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| .2                | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 |
| .2*               | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 |
| .3                | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 | 8.9E-06 |
| .4                | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 |
| .5                | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 | 9.8E-06 |
| .6                | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 |
| .8                | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 | 9.1E-06 |
| .6                | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 | 8.8E-06 |
| .7                | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 | 7.9E-06 |
| .7                | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 |
| .7                | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 |
| 1.0               | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 |
| 1.5               | 2.8E-06 | 3.0E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06 | 3.0E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 |
| 2.0               | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 |
| 2.5               | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.3E-06 |
| 3.0               | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 | 9.5E-07 |
| 3.5               | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 | 7.3E-07 |
| 4.0               | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 |
| 4.5               | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 | 4.7E-07 |
| 5.0               | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 | 3.9E-07 |
| 6.0               | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 | 2.9E-07 |
| 7.0               | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 |
| 8.0               | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 | 1.8E-07 |
| 9.0               | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 |
| 10.0              | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 |
| 15.0              | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |
| 20.0              | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 | 3.6E-08 |
| 25.0              | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 | 2.5E-08 |
| 30.0              | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 |
| 40.0              | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 |
| 50.0              | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 | 7.6E-09 |

MAX  
 CONC 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08 1.1E-08  
 DIST(MI) .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4

TABLE NO. V-19

NO. 5: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR











FEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
VENT RELEASE STABILITY  
SPEED 3. MPH  
LOW FLOW  
STABLE  
147- 168  
146 168  
124- 147-  
102- 124-  
79- 101-  
34- 87-  
33 88 78 101 124

| DISTANCE<br>MILES | NNE  | NE   | ENE  | E    | ESE  | SE   | SSE  | S    | SSW  | SW   | WSW  | W    | WNW  | NW   | NNW  | N    |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 192-              | 214- | 237- | 259- | 282- | 304- | 327- | 348- | 12-  | 34-  | 87-  | 79-  | 101- | 102- | 147- | 168- | 101  |
| 213               | 238  | 258  | 281  | 303  | 324  | 348  | 348  | 11   | 33   | 88   | 78   | 101  | 124  | 146  | 168  | 101  |
| 2.0               | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  |
| 3.0               | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  |
| 4.0               | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| 5.0               | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  |
| 6.0               | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  |
| 7.0               | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  |
| 8.0               | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  | 8.0  |
| 9.0               | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  |
| 10.0              | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| 15.0              | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| 20.0              | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| 25.0              | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| 30.0              | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| 40.0              | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| 50.0              | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 |

MAX  
 CONC 1.1E-04 6.8E-05 7.5E-05 3.3E-05 4.7E-05 3.7E-05 4.7E-05 7.7E-05 1.8E-04 1.1E-04 8.8E-05 1.1E-04 1.2E-04 8.5E-05 6.1E-05 6.8E-05  
 DIST(MI) 2.0 3.0 4.0 4.0 4.0 3.8 3.0 3.0 1.8 1.8 2.0 2.0 2.8 2.8 2.0 3.0 3.0

TABLE NO. V-23

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O  
VENT RELEASE STABILITY  
SPEED S. MPH  
LOW FLOW  
STABILITY  
S. MPH

WIND DIRECTION RANGES  
SSW SW MSW W MNW NW NNW N

DOWN WIND SECTOR BEARING  
SSW SW MSW W MNW NW NNW N

| DISTANCE MILES | NNE  | NE   | ENE  | E    | ESE  | SE   | SSE  | SSW | SW  | MSW | W   | MNW | NW   | NNW  | N    |
|----------------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|------|------|------|
| 192-           | 214- | 237- | 288- | 282- | 304- | 327- | 349- | 12- | 34- | 87- | 78- | 101 | 102- | 124- | 168- |
| 213            | 238  | 288  | 281  | 303  | 326  | 348  | 371  | 37  | 64  | 78  | 101 | 123 | 148  | 168  | 191  |
| 2.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 3.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 4.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 5.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 6.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 7.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 8.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 9.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 10.0           | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 1.5            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 2.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 3.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 4.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 5.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 6.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 7.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 8.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 9.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 10.0           | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 1.5            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 2.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 3.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 4.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 5.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 6.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 7.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 8.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 9.0            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |
| 10.0           | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  |

MAX  
CONC 6.9E-05 4.3E-05 5.4E-05 3.9E-05 3.0E-05 3.0E-05 7.5E-05 9.3E-05 1.7E-04 9.3E-05 6.0E-05 9.3E-05 9.6E-05 9.3E-05 4.1E-05 4.3E-05  
DIST(MI) 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-24

PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOWNS CALCULATION PROCEDURE

CHI/Q VENT RELEASE LOW FLOW  
STABILITY STABLE  
SPEED 7 MPH

|      |      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192- | 214- | 237- | 259- | 282- | 304- | 327- | 349- | 12- | 34- | 57- | 78- | 102- | 124- | 147- | 169- |
| 213  | 236  | 258  | 281  | 303  | 326  | 348  | 371  | 33  | 56  | 78  | 101 | 123  | 146  | 168  | 191  |

WIND DIRECTION RANGES  
DOWN WIND SECTOR BEARING

| DISTANCE<br>MILES | NNE | NE  | ENE | E   | ESE | SE  | SSE | S   | SSW | SW  | MSW     | W       | MNW     | NW      | NNW | N   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|---------|---------|---------|-----|-----|
| 2.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1E-14 | 0.0     | 2.1E-14 | 0.0     | 0.0 | 0.0 |
| 3.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6E-13 | 0.0     | 2.6E-13 | 0.0     | 0.0 | 0.0 |
| 4.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.6E-11 | 6.7E-18 | 9.6E-11 | 6.7E-18 | 0.0 | 0.0 |
| 5.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.4E-09 | 7.4E-09 | 7.4E-09 | 7.4E-09 | 0.0 | 0.0 |
| 6.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8E-14 | 2.8E-14 | 2.8E-14 | 2.8E-14 | 0.0 | 0.0 |
| 7.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4E-11 | 2.4E-11 | 2.4E-11 | 2.4E-11 | 0.0 | 0.0 |
| 8.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1E-06 | 4.1E-06 | 4.1E-06 | 4.1E-06 | 0.0 | 0.0 |
| 9.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8E-08 | 4.8E-08 | 4.8E-08 | 4.8E-08 | 0.0 | 0.0 |
| 10.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 0.0 | 0.0 |
| 11.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.4E-08 | 6.4E-08 | 6.4E-08 | 6.4E-08 | 0.0 | 0.0 |
| 12.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.8E-08 | 9.8E-08 | 9.8E-08 | 9.8E-08 | 0.0 | 0.0 |
| 13.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 0.0 | 0.0 |
| 14.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2E-08 | 1.2E-08 | 1.2E-08 | 1.2E-08 | 0.0 | 0.0 |
| 15.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.8E-08 | 9.8E-08 | 9.8E-08 | 9.8E-08 | 0.0 | 0.0 |
| 16.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8E-05 | 4.8E-05 | 4.8E-05 | 4.8E-05 | 0.0 | 0.0 |
| 17.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8E-05 | 4.8E-05 | 4.8E-05 | 4.8E-05 | 0.0 | 0.0 |
| 18.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 0.0 | 0.0 |
| 19.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9E-05 | 2.9E-05 | 2.9E-05 | 2.9E-05 | 0.0 | 0.0 |
| 20.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 0.0 | 0.0 |
| 21.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 0.0 | 0.0 |
| 22.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 0.0 | 0.0 |
| 23.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 0.0 | 0.0 |
| 24.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 0.0 | 0.0 |
| 25.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 0.0 | 0.0 |
| 26.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 0.0 | 0.0 |
| 27.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.3E-06 | 9.3E-06 | 9.3E-06 | 9.3E-06 | 0.0 | 0.0 |
| 28.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 0.0 | 0.0 |
| 29.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5E-06 | 6.5E-06 | 6.5E-06 | 6.5E-06 | 0.0 | 0.0 |
| 30.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 0.0 | 0.0 |
| 31.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 0.0 | 0.0 |
| 32.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 0.0 | 0.0 |
| 33.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 0.0 | 0.0 |
| 34.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 0.0 | 0.0 |
| 35.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 0.0 | 0.0 |
| 36.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 0.0 | 0.0 |
| 37.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 0.0 | 0.0 |
| 38.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 0.0 | 0.0 |
| 39.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 0.0 | 0.0 |
| 40.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 0.0 | 0.0 |
| 41.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 5.8E-07 | 0.0 | 0.0 |
| 42.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3E-04 | 1.3E-04 | 1.3E-04 | 1.3E-04 | 0.0 | 0.0 |
| 43.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.9E-05 | 9.9E-05 | 9.9E-05 | 9.9E-05 | 0.0 | 0.0 |
| 44.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0     | 3.0     | 3.0     | 3.0     | 0.0 | 0.0 |
| 45.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0     | 2.0     | 2.0     | 2.0     | 0.0 | 0.0 |
| 46.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0     | 1.0     | 1.0     | 1.0     | 0.0 | 0.0 |
| 47.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7     | 0.7     | 0.7     | 0.7     | 0.0 | 0.0 |
| 48.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3E-04 | 1.3E-04 | 1.3E-04 | 1.3E-04 | 0.0 | 0.0 |
| 49.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.9E-05 | 9.9E-05 | 9.9E-05 | 9.9E-05 | 0.0 | 0.0 |
| 50.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.8E-05 | 6.8E-05 | 6.8E-05 | 6.8E-05 | 0.0 | 0.0 |

MAX CONC 4.9E-05 3.8E-05 4.8E-05 3.8E-05 2.4E-05 9.9E-05 1.3E-04 1.3E-04 6.8E-05 6.8E-05 6.8E-05 6.8E-05 6.8E-05 6.8E-05 6.8E-05 6.8E-05 6.8E-05  
DIST(MI) 2.0 2.0 2.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0

TABLE NO. V-25

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR















PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O VENT RELEASE HIGH FLOW  
STABILITY STABLE  
SPEED 1. MPH

|      |      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192- | 214- | 237- | 259- | 282- | 304- | 327- | 349- | 12- | 34- | 57- | 79- | 102- | 124- | 147- | 169- |
| 213  | 236  | 258  | 281  | 303  | 326  | 348  | 11   | 33  | 56  | 78  | 101 | 123  | 146  | 168  | 181  |

| DISTANCE<br>MILES | WIND DIRECTION RANGES |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|-------------------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                   | NNE                   | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
| .2 0.             | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .3 0.             | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .4 0.             | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .5 0.             | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .6 0.             | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .7 0.             | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| .7 0.             | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.0 0.            | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 1.8 0.            | 0.0                   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.0 2.2E-06       | 1.7E-07               | 6.8E-08 | 1.7E-08 | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 2.5 2.5E-05       | 5.1E-07               | 3.0E-06 | 1.8E-07 | 1.4E-08 | 6.4E-08 | 3.1E-07 | 2.2E-06 | 1.4E-08 | 4.3E-08 | 1.8E-07 | 2.3E-07 | 2.2E-06 | 2.2E-06 | 2.2E-06 | 2.2E-15 | 2.2E-15 |
| 3.0 3.3E-05       | 3.3E-05               | 6.8E-06 | 7.7E-07 | 7.7E-07 | 3.4E-07 | 1.7E-06 | 3.4E-06 | 1.2E-08 | 1.1E-04 | 2.6E-08 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 |
| 3.5 3.9E-05       | 3.8E-05               | 1.0E-05 | 1.9E-06 | 3.5E-06 | 3.5E-06 | 3.5E-06 | 1.7E-06 | 1.4E-04 | 7.4E-08 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 |
| 4.0 7.2E-05       | 1.4E-05               | 8.7E-06 | 3.0E-05 | 5.7E-06 | 5.7E-06 | 5.7E-06 | 1.4E-05 | 1.4E-04 | 9.1E-05 | 3.0E-05 | 3.0E-05 | 3.0E-05 | 3.0E-05 | 3.0E-05 | 3.0E-05 | 3.0E-05 |
| 4.5 6.8E-05       | 6.8E-05               | 3.3E-05 | 1.1E-05 | 3.3E-05 | 7.8E-06 | 7.8E-06 | 1.7E-06 | 1.2E-04 | 1.1E-04 | 4.3E-05 | 4.3E-05 | 4.3E-05 | 4.3E-05 | 4.3E-05 | 4.3E-05 | 4.3E-05 |
| 5.0 9.0E-05       | 8.3E-05               | 3.4E-05 | 1.3E-05 | 3.4E-05 | 1.0E-05 | 1.0E-05 | 1.9E-06 | 1.0E-04 | 9.5E-08 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 | 6.3E-05 |
| 6.0 7.9E-05       | 7.8E-05               | 3.4E-05 | 1.7E-05 | 3.4E-05 | 2.8E-05 | 2.8E-05 | 2.2E-06 | 2.8E-05 | 2.8E-05 | 7.5E-05 | 7.5E-05 | 7.5E-05 | 7.5E-05 | 7.5E-05 | 7.5E-05 | 7.5E-05 |
| 7.0 6.4E-05       | 6.2E-05               | 4.9E-05 | 3.0E-05 | 4.2E-05 | 3.3E-05 | 3.3E-05 | 2.3E-05 | 3.3E-05 | 6.5E-08 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 | 6.4E-05 |
| 8.0 5.4E-05       | 5.3E-05               | 4.9E-05 | 3.0E-05 | 3.8E-05 | 3.0E-05 | 3.0E-05 | 2.7E-05 | 3.0E-05 | 3.0E-05 | 8.4E-05 | 8.4E-05 | 8.4E-05 | 8.4E-05 | 8.4E-05 | 8.4E-05 | 8.4E-05 |
| 9.0 4.6E-05       | 4.6E-05               | 4.2E-05 | 2.8E-05 | 3.4E-05 | 2.8E-05 | 2.8E-05 | 2.1E-05 | 2.8E-05 | 2.6E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 |
| 10.0 4.0E-05      | 4.0E-05               | 3.7E-05 | 2.5E-05 | 3.0E-05 | 2.6E-05 | 2.6E-05 | 2.1E-05 | 2.6E-05 | 2.6E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 |
| 15.0 2.2E-05      | 2.2E-05               | 2.2E-05 | 2.0E-05 | 1.9E-05 | 1.8E-05 | 1.8E-05 | 1.6E-05 | 1.8E-05 | 1.8E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 |
| 20.0 1.8E-05      | 1.8E-05               | 1.8E-05 | 1.5E-05 | 1.4E-05 | 1.3E-05 | 1.3E-05 | 1.2E-05 | 1.3E-05 | 1.3E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 |
| 25.0 1.1E-05      | 1.1E-05               | 1.1E-05 | 1.0E-05 | 1.0E-05 | 9.7E-06 | 9.7E-06 | 9.2E-06 | 9.7E-06 | 9.7E-06 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 |
| 30.0 8.4E-06      | 8.4E-06               | 8.3E-06 | 8.0E-06 | 7.7E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 7.4E-06 | 8.4E-06 | 8.4E-06 | 8.4E-06 | 8.4E-06 | 8.4E-06 | 8.4E-06 | 8.4E-06 |
| 40.0 5.6E-06      | 5.6E-06               | 5.6E-06 | 5.4E-06 | 5.3E-06 | 5.1E-06 | 5.1E-06 | 5.1E-06 | 5.1E-06 | 5.1E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 |
| 60.0 4.1E-06      | 4.1E-06               | 4.1E-06 | 4.0E-06 | 3.9E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 4.1E-06 | 4.1E-06 | 4.1E-06 | 4.1E-06 | 4.1E-06 | 4.1E-06 | 4.1E-06 |

|     |      |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |         |         |         |         |         |         |     |     |     |
|-----|------|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|---------|---------|---------|---------|---------|---------|-----|-----|-----|
| MAX | COND | DIST(MI) | 5.0 | 6.0 | 8.0 | 8.0 | 7.0 | 7.0 | 6.0 | 7.0 | 3.5 | 4.5 | 7.0 | 4.5 | 4.5 | 6.0 | 4.5 | 1.2E-04 | 8.0E-05 | 1.1E-04 | 8.0E-05 | 1.1E-04 | 8.0E-05 | 1.2E-04 | 4.5 | 6.0 | 4.5 |
|-----|------|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|---------|---------|---------|---------|---------|---------|-----|-----|-----|

TABLE NO. V-30

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q  
VENT RELEASE HIGH FLOW  
STABILITY STABLE  
SPEED 3 MPH

12- 34- 79- 102- 124- 147- 169-  
33 86 101 123 146 168 181

WIND DIRECTION RANGES  
349- 12- 34- 87- 79- 102- 124- 147- 169-  
11 33 86 101 123 146 168 181

DOWN WIND SECTOR BEARING  
SSW S SSE SSE SSW S

DOWN WIND SECTOR BEARING  
SSW S SSE SSE SSW S

DOWN WIND SECTOR BEARING  
SSW S SSE SSE SSW S

| DISTANCE<br>MILES | NNE | NE  | ENE | E   | ESE | SE  | SSE | S   | SSW | SW  | WSW | W   | WNW | NW  | NNW | N   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 36.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 37.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 39.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 41.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 42.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 43.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 44.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 45.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 46.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 47.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 49.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| MAX<br>CONC | 8.4E-05 | 6.7E-05 | 4.0E-05 | 2.3E-05 | 2.4E-05 | 2.4E-05 | 3.4E-05 | 6.3E-05 | 1.1E-04 | 7.7E-05 | 6.1E-05 | 6.1E-05 | 8.4E-05 | 5.5E-05 | 6.8E-05 | 6.8E-05 |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| DIST(MI)    | 2.5     | 3.0     | 3.5     | 4.0     | 4.5     | 5.0     | 5.5     | 6.0     | 6.5     | 7.0     | 7.5     | 8.0     | 8.5     | 9.0     | 9.5     | 10.0    |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-31















PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
 VENT RELEASE NORMAL FLOW  
 STABILITY UNSTABLE  
 SPEED 8 MPH

|      |      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 192- | 214- | 237- | 209- | 282- | 304- | 327- | 348- | 12- | 34- | 87- | 78- | 102- | 124- | 147- | 169- |
| 213  | 236  | 268  | 281  | 303  | 328  | 348  | 368  | 33  | 85  | 76  | 101 | 123  | 148  | 168  | 191  |

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2                 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.8E-05 | 2.0E-05 | 2.2E-05 | 2.4E-05 | 2.7E-05 | 2.6E-05 | 2.7E-05 | 2.6E-05 | 1.3E-05 | 1.3E-05 |
| 3                 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 1.6E-05 | 1.2E-05 | 2.0E-05 | 2.2E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 1.2E-05 | 1.2E-05 |
| 4                 | 7.3E-06 | 7.3E-06 | 7.3E-06 | 7.3E-06 | 7.3E-06 | 7.3E-06 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 9.9E-06 | 9.9E-06 |
| 5                 | 5.3E-06 | 5.3E-06 | 5.3E-06 | 5.3E-06 | 5.3E-06 | 5.3E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 7.3E-06 | 7.3E-06 |
| 6                 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 |
| 7                 | 3.6E-06 | 3.6E-06 | 3.6E-06 | 3.6E-06 | 3.6E-06 | 3.6E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 |
| 8                 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 | 3.4E-06 |
| 10                | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 |
| 15                | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 |
| 20                | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 | 6.4E-07 |
| 25                | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 | 4.3E-07 |
| 30                | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 |
| 40                | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 | 2.4E-07 |
| 50                | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 | 1.9E-07 |
| 60                | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 | 1.3E-07 |
| 70                | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 |
| 80                | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 | 7.2E-08 |
| 90                | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 | 5.7E-08 |
| 100               | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 | 3.8E-08 |
| 150               | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 |
| 200               | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 | 1.1E-08 |
| 250               | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 | 7.7E-09 |
| 300               | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 |
| 400               | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 | 3.4E-09 |
| 500               | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 | 2.3E-09 |

|          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MAX      | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.8E-05 | 2.0E-05 | 2.2E-05 | 2.4E-05 | 2.7E-05 | 2.6E-05 | 2.7E-05 | 2.6E-05 | 1.3E-05 | 1.3E-05 |
| CONC     | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.8E-05 | 2.0E-05 | 2.2E-05 | 2.4E-05 | 2.7E-05 | 2.6E-05 | 2.7E-05 | 2.6E-05 | 1.3E-05 | 1.3E-05 |
| DIST(MI) | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      | .2      |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-8







PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY COSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
VENT RELEASE NORMAL FLOW  
STABILITY NEUTRAL  
SPEED 12 MPH

| DISTANCE |         | WIND DIRECTION RANGES |         |         |         |         |         |         |         |         |         | DOWN WIND SECTOR BEARINGS |         |         |  | MILES |  |  |  |
|----------|---------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------|---------|---------|--|-------|--|--|--|
|          |         | NNE                   | NE      | E       | ESE     | SE      | SSW     | SW      | WSW     | W       | WNW     | NW                        | NNW     | M       |  |       |  |  |  |
| 192      | 214     | 237                   | 259     | 282     | 304     | 327     | 349     | 371     | 393     | 415     | 437     | 459                       | 481     | 503     |  |       |  |  |  |
| 213      | 237     | 268                   | 281     | 303     | 326     | 348     | 371     | 393     | 415     | 437     | 459     | 481                       | 503     | 525     |  |       |  |  |  |
| 2.2      | 2.3E-05 | 2.3E-05               | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05                   | 2.3E-05 | 2.3E-05 |  |       |  |  |  |
| 3        | 1.6E-05 | 1.6E-05               | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05                   | 1.6E-05 | 1.6E-05 |  |       |  |  |  |
| 4        | 1.1E-05 | 1.1E-05               | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05                   | 1.1E-05 | 1.1E-05 |  |       |  |  |  |
| 5        | 8.7E-06 | 8.7E-06               | 8.7E-06 | 8.7E-06 | 8.7E-06 | 8.7E-06 | 8.7E-06 | 8.7E-06 | 8.7E-06 | 8.7E-06 | 8.7E-06 | 8.7E-06                   | 8.7E-06 | 8.7E-06 |  |       |  |  |  |
| 6        | 6.2E-06 | 6.2E-06               | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06 | 6.2E-06                   | 6.2E-06 | 6.2E-06 |  |       |  |  |  |
| 7        | 4.7E-06 | 4.7E-06               | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06                   | 4.7E-06 | 4.7E-06 |  |       |  |  |  |
| 8        | 3.2E-06 | 3.2E-06               | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06 | 3.2E-06                   | 3.2E-06 | 3.2E-06 |  |       |  |  |  |
| 9        | 1.7E-06 | 1.7E-06               | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06 | 1.7E-06                   | 1.7E-06 | 1.7E-06 |  |       |  |  |  |
| 10       | 1.2E-06 | 1.2E-06               | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06                   | 1.2E-06 | 1.2E-06 |  |       |  |  |  |
| 15       | 4.4E-07 | 4.4E-07               | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07 | 4.4E-07                   | 4.4E-07 | 4.4E-07 |  |       |  |  |  |
| 20       | 3.3E-07 | 3.3E-07               | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07                   | 3.3E-07 | 3.3E-07 |  |       |  |  |  |
| 25       | 2.2E-07 | 2.2E-07               | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07                   | 2.2E-07 | 2.2E-07 |  |       |  |  |  |
| 30       | 1.1E-07 | 1.1E-07               | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07                   | 1.1E-07 | 1.1E-07 |  |       |  |  |  |
| 35       | 8.0E-08 | 8.0E-08               | 8.0E-08 | 8.0E-08 | 8.0E-08 | 8.0E-08 | 8.0E-08 | 8.0E-08 | 8.0E-08 | 8.0E-08 | 8.0E-08 | 8.0E-08                   | 8.0E-08 | 8.0E-08 |  |       |  |  |  |
| 40       | 6.0E-08 | 6.0E-08               | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08                   | 6.0E-08 | 6.0E-08 |  |       |  |  |  |
| 50       | 1.4E-08 | 1.4E-08               | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08 | 1.4E-08                   | 1.4E-08 | 1.4E-08 |  |       |  |  |  |

MAX CONC 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05 2.3E-05  
DIST(MI) .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-7

PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOLC CALCULATION PROCEDURE

CHI/O DEPLETED  
 VENT RELEASE NORMAL FLOW  
 STABILITY NEUTRAL  
 SPEED 15 MPH

| DISTANCE<br>MILES | WIND DIRECTION RANGES |             |             |             |             |             |             |             |             |             | DOWN WIND SECTOR BEARING |           |          |            |           |            |          |  |  |  |
|-------------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------------|-----------|----------|------------|-----------|------------|----------|--|--|--|
|                   | 182-<br>213           | 214-<br>238 | 237-<br>268 | 209-<br>281 | 282-<br>303 | 304-<br>326 | 327-<br>348 | 349-<br>371 | 372-<br>393 | 394-<br>415 | SW<br>56                 | WSW<br>78 | W<br>101 | WNW<br>123 | NW<br>148 | NNW<br>168 | N<br>181 |  |  |  |
| 0.2               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 0.3               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 0.4               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 0.5               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 0.6               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 0.7               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 0.8               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 0.9               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 1.0               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 1.5               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 2.0               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 2.5               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 3.0               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 3.5               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 4.0               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 4.5               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 5.0               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 5.5               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 6.0               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 6.5               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 7.0               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 7.5               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 8.0               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 8.5               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 9.0               | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 10.0              | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 15.0              | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 20.0              | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 25.0              | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 30.0              | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 40.0              | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |
| 50.0              | 1.9E-05               | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05     | 1.9E-05                  | 1.9E-05   | 1.9E-05  | 1.9E-05    | 1.9E-05   | 1.9E-05    | 1.9E-05  |  |  |  |

MAX CONC 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05 1.9E-05  
 DIST(MI) .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-8





PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE  
 CHI/O DEPLETED  
 VENT RELEASE NORMAL FLOW  
 STABILITY NEUTRAL  
 SPEED 10. MPH

WIND DIRECTION RANGES

|         |         |         |         |         |         |         |       |       |       |       |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|---------|-------|-------|-------|-------|---------|---------|---------|---------|---------|
| 192-193 | 214-215 | 228-229 | 281-282 | 303-304 | 328-329 | 348-349 | 11-12 | 33-34 | 88-89 | 78-79 | 101-102 | 123-124 | 146-147 | 168-169 | 181-182 |
|---------|---------|---------|---------|---------|---------|---------|-------|-------|-------|-------|---------|---------|---------|---------|---------|

.....

| DISTANCE<br>MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2                 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 |
| 3                 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 |
| 4                 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 |
| 5                 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 |
| 6                 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 | 5.5E-06 |
| 7                 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 | 4.6E-06 |
| 8                 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 |
| 9                 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 |
| 10                | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.6E-06 |
| 15                | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 |
| 20                | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 |
| 25                | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 |
| 30                | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 |
| 35                | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 | 3.6E-07 |
| 40                | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 |
| 50                | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 | 1.6E-08 |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTION

TABLE NO. A-8





PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
VENT RELEASE NORMAL FLOW  
STABILITY NEUTRAL  
SPEED 37. MPH

| WIND DIRECTION RANGES | SSW     | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 192-213               | 214-236 | 237-258 | 259-281 | 282-303 | 304-328 | 327-348 | 349-368 | 369-388 | 389-408 |
| 102-123               | 78-101  | 87-101  | 78-101  | 102-123 | 124-146 | 147-168 | 169-191 |         |         |

| DISTANCE MILES | NNE     | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2.0            | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.4E-05 | 1.9E-05 | 2.6E-05 | 3.0E-05 | 3.2E-05 | 3.2E-05 | 3.2E-05 | 3.2E-05 | 3.2E-05 | 1.1E-05 |
| 3.0            | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.3E-05 | 1.8E-05 | 2.4E-05 | 2.8E-05 | 2.9E-05 | 2.9E-05 | 2.9E-05 | 2.9E-05 | 2.9E-05 | 1.0E-05 |
| 4.0            | 9.0E-06 | 9.0E-06 | 9.0E-06 | 9.0E-06 | 9.0E-06 | 9.0E-06 | 1.2E-05 | 1.6E-05 | 2.2E-05 | 2.6E-05 | 2.7E-05 | 2.7E-05 | 2.7E-05 | 2.7E-05 | 2.7E-05 | 9.0E-06 |
| 5.0            | 8.0E-06 | 8.0E-06 | 8.0E-06 | 8.0E-06 | 8.0E-06 | 8.0E-06 | 1.1E-05 | 1.5E-05 | 2.1E-05 | 2.5E-05 | 2.6E-05 | 2.6E-05 | 2.6E-05 | 2.6E-05 | 2.6E-05 | 8.0E-06 |
| 6.0            | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 1.0E-05 | 1.4E-05 | 2.0E-05 | 2.4E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 7.0E-06 |
| 7.0            | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 9.0E-06 | 1.3E-05 | 1.9E-05 | 2.3E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 6.0E-06 |
| 8.0            | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 8.0E-06 | 1.2E-05 | 1.8E-05 | 2.2E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 5.0E-06 |
| 9.0            | 4.0E-06 | 4.0E-06 | 4.0E-06 | 4.0E-06 | 4.0E-06 | 4.0E-06 | 7.0E-06 | 1.1E-05 | 1.7E-05 | 2.1E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 4.0E-06 |
| 10.0           | 3.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 6.0E-06 | 1.0E-05 | 1.6E-05 | 2.0E-05 | 2.1E-05 | 2.1E-05 | 2.1E-05 | 2.1E-05 | 2.1E-05 | 3.0E-06 |
| 15.0           | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 5.0E-06 | 9.0E-06 | 1.3E-05 | 1.7E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 2.0E-06 |
| 20.0           | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 4.0E-06 | 8.0E-06 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.5E-06 |
| 25.0           | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 3.0E-06 | 7.0E-06 | 1.1E-05 | 1.5E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.2E-06 |
| 30.0           | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 2.0E-06 | 6.0E-06 | 1.0E-05 | 1.4E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.0E-06 |
| 40.0           | 8.0E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 1.0E-06 | 5.0E-06 | 9.0E-06 | 1.3E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 8.0E-07 |
| 50.0           | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 9.0E-07 | 4.0E-06 | 4.0E-06 | 1.2E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 7.0E-07 |

| DIST(MI) | .2      | .3      | .2      | .3      | .2      | .3      | .2      | .3      | .2      | .3      | .2      | .3      | .2      | .3      | .2      | .3      |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1.1E-05  | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.4E-05 | 1.9E-05 | 2.6E-05 | 3.0E-05 | 3.2E-05 | 3.2E-05 | 3.2E-05 | 3.2E-05 | 3.2E-05 | 1.1E-05 |
| 1.0E-05  | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.3E-05 | 1.8E-05 | 2.4E-05 | 2.8E-05 | 2.9E-05 | 2.9E-05 | 2.9E-05 | 2.9E-05 | 2.9E-05 | 1.0E-05 |
| 9.0E-06  | 9.0E-06 | 9.0E-06 | 9.0E-06 | 9.0E-06 | 9.0E-06 | 9.0E-06 | 1.2E-05 | 1.6E-05 | 2.2E-05 | 2.6E-05 | 2.7E-05 | 2.7E-05 | 2.7E-05 | 2.7E-05 | 2.7E-05 | 9.0E-06 |
| 8.0E-06  | 8.0E-06 | 8.0E-06 | 8.0E-06 | 8.0E-06 | 8.0E-06 | 8.0E-06 | 1.1E-05 | 1.5E-05 | 2.1E-05 | 2.5E-05 | 2.6E-05 | 2.6E-05 | 2.6E-05 | 2.6E-05 | 2.6E-05 | 8.0E-06 |
| 7.0E-06  | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 1.0E-05 | 1.4E-05 | 2.0E-05 | 2.4E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 7.0E-06 |
| 6.0E-06  | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 9.0E-06 | 1.3E-05 | 1.9E-05 | 2.3E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 6.0E-06 |
| 5.0E-06  | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 5.0E-06 | 8.0E-06 | 1.2E-05 | 1.8E-05 | 2.2E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 5.0E-06 |
| 4.0E-06  | 4.0E-06 | 4.0E-06 | 4.0E-06 | 4.0E-06 | 4.0E-06 | 4.0E-06 | 7.0E-06 | 1.1E-05 | 1.7E-05 | 2.1E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 4.0E-06 |
| 3.0E-06  | 3.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 6.0E-06 | 1.0E-05 | 1.6E-05 | 2.0E-05 | 2.1E-05 | 2.1E-05 | 2.1E-05 | 2.1E-05 | 2.1E-05 | 3.0E-06 |
| 2.0E-06  | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 2.0E-06 | 5.0E-06 | 9.0E-06 | 1.3E-05 | 1.7E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 2.0E-06 |
| 1.5E-06  | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 4.0E-06 | 8.0E-06 | 1.2E-05 | 1.6E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.5E-06 |
| 1.2E-06  | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 1.2E-06 | 3.0E-06 | 7.0E-06 | 1.1E-05 | 1.5E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.2E-06 |
| 1.0E-06  | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 1.0E-06 | 2.0E-06 | 6.0E-06 | 1.0E-05 | 1.4E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.0E-06 |
| 8.0E-07  | 8.0E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 8.0E-07 | 1.0E-06 | 5.0E-06 | 9.0E-06 | 1.3E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 8.0E-07 |
| 7.0E-07  | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 7.0E-07 | 9.0E-07 | 4.0E-06 | 4.0E-06 | 1.2E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 1.3E-05 | 7.0E-07 |

TABLE NO. V-11

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR





PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O DEPLETED  
 VENT RELEASE NORMAL FLOW  
 STABILITY STABLE  
 SPEED 3. MPH

|      |      |      |      |      |      |      |      |     |     |     |     |      |      |      |      |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 182- | 214- | 237- | 259- | 282- | 304- | 327- | 349- | 12- | 34- | 57- | 78- | 102- | 124- | 147- | 169- |
| 213  | 236  | 258  | 281  | 303  | 326  | 348  | 371  | 33  | 56  | 78  | 101 | 123  | 146  | 168  | 181  |

| DISTANCE<br>MILES | NNE | NE  | ENE | E   | ESE | SE  | SSE | S   | SSW | SW  | MSW | W   | MNW | NW  | NNW | N   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 36.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 37.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 39.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 41.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 42.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 43.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 44.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 45.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 46.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 47.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 49.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

MAX  
 CDHC 8.8E-05 6.2E-05 3.0E-05 4.7E-05 3.0E-05 3.3E-05 4.8E-05 1.3E-04 1.1E-04 8.8E-05 8.8E-05 8.8E-05 8.8E-05 8.8E-05 8.8E-05 8.8E-05  
 DIST(MI) 2.0 3.0 4.0 4.8 4.0 3.5 2.5 2.0 1.8 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0

TABLE NO. V-13

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O DEPLETED  
VENT RELEASE NORMAL FLOW  
STABILITY STABLE  
SPEED 5 MPH

| 192- | 214- | 237- | 258- | 282- | 304- | 327- | 349- | 12- | 34- | 87- | 79- | 102- | 124- | 147- | 169- |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|------|
| 213  | 236  | 268  | 281  | 303  | 328  | 348  | 388  | 33  | 86  | 78  | 101 | 123  | 146  | 168  | 191  |

DOWN WIND WIND SECTOR BEARING

| DISTANCE<br>MILES | NRE | NE | ENE | E | ESE | SE | SSE | S | SSW | SW | WSW | W | WNW | NW | NNW | N |
|-------------------|-----|----|-----|---|-----|----|-----|---|-----|----|-----|---|-----|----|-----|---|
| 2.0               | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 3.0               | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 4.0               | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 5.0               | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 6.0               | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 7.0               | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 8.0               | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 9.0               | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 10.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 11.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 12.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 13.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 14.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 15.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 16.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 17.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 18.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 19.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 20.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 21.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 22.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 23.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 24.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 25.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 26.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 27.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 28.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 29.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 30.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 31.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 32.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 33.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 34.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 35.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 36.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 37.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 38.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 39.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 40.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 41.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 42.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 43.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 44.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 45.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 46.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 47.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 48.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 49.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |
| 50.0              | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 | 0   | 0  | 0   | 0 |

| MAX<br>CONC | 4.1E-08 | 5.2E-08 | 2.8E-08 | 2.8E-08 | 2.8E-08 | 3.5E-08 | 4.7E-08 | 7.4E-08 | 8.6E-08 | 7.4E-08 | 8.0E-08 | 7.4E-08 | 8.6E-08 | 7.4E-08 | 4.1E-08 | 4.1E-08 |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| DIST(MI)    | 3.0     | 2.5     | 2.0     | 2.0     | 4.0     | 3.5     | 1.5     | 1.5     | 1.5     | 1.5     | 1.5     | 1.5     | 1.5     | 1.5     | 1.5     | 3.0     |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-14







PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O DEPLETED  
 VENT RELEASE NORMAL FLOW  
 STABILITY TABLE  
 SPEED 10. MPH

| DISTANCE<br>MILES | WIND DIRECTION RANGES |         |         |         |         |         |         |         |         |         | DOWN WIND SECTOR BEARINGS |         |         |         |         |         |  |  |  |  |
|-------------------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------|---------|---------|---------|---------|---------|--|--|--|--|
|                   | NNE                   | NE      | ENE     | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | WSW                       | W       | WNW     | NW      | NNW     | N       |  |  |  |  |
| 2.0               | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 3.0               | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 4.0               | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 5.0               | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 6.0               | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 7.0               | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 8.0               | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 9.0               | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 10.0              | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 15.0              | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 20.0              | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 25.0              | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 30.0              | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 40.0              | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |
| 50.0              | 3.3E-05               | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05                   | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 | 3.3E-05 |  |  |  |  |

MAX  
 CONC 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05 3.8E-05  
 DIST(MI) .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-17







PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O DEPLETED  
 VENT RELEASE  
 STABILITY UNSTABLE  
 SPEED 8. MPH

LOW FLOW  
 124- 147- 169-  
 146 168 191

| WIND DIRECTION RANGES |          | WIND SPEED |        | WIND DIRECTION RANGES |         | WIND SPEED |        |
|-----------------------|----------|------------|--------|-----------------------|---------|------------|--------|
| 12- 34-               | 37- 79-  | 34- 58     | 57- 78 | 12- 34-               | 37- 79- | 34- 58     | 57- 78 |
| 182- 214- 236         | 288- 303 | 327- 348   | 348 11 | 327- 348              | 348 11  | 327- 348   | 348 11 |
| 219                   | 281      | 328        | 303    | 304-                  | 304-    | 328        | 303    |

| DOWN WIND SECTOR BEARING |    | DOWN WIND SECTOR BEARING |    | DOWN WIND SECTOR BEARING |    | DOWN WIND SECTOR BEARING |    |
|--------------------------|----|--------------------------|----|--------------------------|----|--------------------------|----|
| SSW                      | SW | MSW                      | W  | WNW                      | NW | NNW                      | N  |
| 55                       | 55 | 55                       | 55 | 55                       | 55 | 55                       | 55 |
| 55                       | 55 | 55                       | 55 | 55                       | 55 | 55                       | 55 |

| DISTANCE<br>MILES | NE      | E       | ESE     | SE      | SSE     | S       | SSW     | SW      | MSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2.4               | 7E-06   | 4.7E-06 | 4.7E-06 | 4.7E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 2.9               | 5.8E-06 | 5.8E-06 | 5.8E-06 | 5.8E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 3.7               | 7.1E-06 | 7.1E-06 | 7.1E-06 | 7.1E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 4.7               | 7.8E-06 | 7.8E-06 | 7.8E-06 | 7.8E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 5.6               | 6.6E-06 | 6.6E-06 | 6.6E-06 | 6.6E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 5.6               | 3E-06   | 3E-06   | 3E-06   | 3E-06   | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 6.1E-06           | 6.1E-06 | 6.1E-06 | 6.1E-06 | 6.1E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 6.9E-06           | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 6.9E-06           | 6.9E-06 | 6.9E-06 | 6.9E-06 | 6.9E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 7.5E-06           | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 7.4E-06           | 4.9E-06 | 4.9E-06 | 4.9E-06 | 4.9E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 7.4E-06           | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 3.1E-06           | 3.1E-06 | 3.1E-06 | 3.1E-06 | 3.1E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 1.8E-06           | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 2.0E-06           | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 2.8E-06           | 7.4E-07 | 7.4E-07 | 7.4E-07 | 7.4E-07 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 3.0E-06           | 7.4E-07 | 7.4E-07 | 7.4E-07 | 7.4E-07 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 3.8E-06           | 4.1E-07 | 4.1E-07 | 4.1E-07 | 4.1E-07 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 4.0E-06           | 3.3E-07 | 3.3E-07 | 3.3E-07 | 3.3E-07 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 4.5E-06           | 2.6E-07 | 2.6E-07 | 2.6E-07 | 2.6E-07 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 5.0E-06           | 2.2E-07 | 2.2E-07 | 2.2E-07 | 2.2E-07 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 6.0E-06           | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 7.0E-06           | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 8.0E-06           | 8.6E-08 | 8.6E-08 | 8.6E-08 | 8.6E-08 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 9.0E-06           | 7.8E-08 | 7.8E-08 | 7.8E-08 | 7.8E-08 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 10.0E-06          | 5.8E-08 | 5.8E-08 | 5.8E-08 | 5.8E-08 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 15.0E-06          | 3.2E-08 | 3.2E-08 | 3.2E-08 | 3.2E-08 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 20.0E-06          | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 25.0E-06          | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 30.0E-06          | 9.3E-09 | 9.3E-09 | 9.3E-09 | 9.3E-09 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 40.0E-06          | 5.6E-09 | 5.6E-09 | 5.6E-09 | 5.6E-09 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |
| 50.0E-06          | 3.8E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 1.3E-05 | 1.8E-05 | 2.5E-05 | 2.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.7E-06 |

| MAX | CONC | 7.5E-06 | 7.5E-06 | 7.5E-06 | 7.5E-06 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 | 2.3E-05 |
|-----|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|     |      | .4      | .4      | .4      | .4      | .3      | .3      | .3      | .3      | .2      | .2      | .2      | .2      | .2      |
|     |      | .4      | .4      | .4      | .4      | .3      | .3      | .3      | .3      | .2      | .2      | .2      | .2      | .2      |
|     |      | .4      | .4      | .4      | .4      | .3      | .3      | .3      | .3      | .2      | .2      | .2      | .2      | .2      |

TABLE NO. V-20

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR



PEACH BOTTOM ATOMIC POWER STATION  
RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O DELETED  
VENT RELEASE  
STABILITY UNSTABLE  
SPEED 7 MPH  
LOW FLOW  
147-169  
148-168  
147-169  
148-168

| DISTANCE MILES | NNE     | NE      | E       | ESE     | SE      | SSW     | SW      | WSW     | W       | MNW      | NW       | NNW      | N       |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|---------|
| 2              | 4.3E-06 | 4.3E-06 | 4.3E-06 | 4.3E-06 | 4.3E-06 | 1.1E-05 | 1.1E-05 | 2.2E-05 | 2.2E-05 | 2.7E-05  | 2.7E-05  | 2.7E-05  | 4.3E-05 |
| 3              | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 4.8E-06 | 1.2E-05 | 1.2E-05 | 2.4E-05 | 2.4E-05 | 2.9E-05  | 2.9E-05  | 2.9E-05  | 4.4E-05 |
| 4              | 5.3E-06 | 5.3E-06 | 5.3E-06 | 5.3E-06 | 5.3E-06 | 1.3E-05 | 1.3E-05 | 2.6E-05 | 2.6E-05 | 3.1E-05  | 3.1E-05  | 3.1E-05  | 4.6E-05 |
| 5              | 5.8E-06 | 5.8E-06 | 5.8E-06 | 5.8E-06 | 5.8E-06 | 1.4E-05 | 1.4E-05 | 2.8E-05 | 2.8E-05 | 3.3E-05  | 3.3E-05  | 3.3E-05  | 4.8E-05 |
| 6              | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 1.5E-05 | 1.5E-05 | 3.0E-05 | 3.0E-05 | 3.5E-05  | 3.5E-05  | 3.5E-05  | 5.0E-05 |
| 7              | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 6.8E-06 | 1.6E-05 | 1.6E-05 | 3.2E-05 | 3.2E-05 | 3.7E-05  | 3.7E-05  | 3.7E-05  | 5.2E-05 |
| 8              | 7.3E-06 | 7.3E-06 | 7.3E-06 | 7.3E-06 | 7.3E-06 | 1.7E-05 | 1.7E-05 | 3.4E-05 | 3.4E-05 | 3.9E-05  | 3.9E-05  | 3.9E-05  | 5.4E-05 |
| 9              | 7.8E-06 | 7.8E-06 | 7.8E-06 | 7.8E-06 | 7.8E-06 | 1.8E-05 | 1.8E-05 | 3.6E-05 | 3.6E-05 | 4.1E-05  | 4.1E-05  | 4.1E-05  | 5.6E-05 |
| 10             | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 1.9E-05 | 1.9E-05 | 3.8E-05 | 3.8E-05 | 4.3E-05  | 4.3E-05  | 4.3E-05  | 5.8E-05 |
| 15             | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 2.2E-05 | 2.2E-05 | 4.4E-05 | 4.4E-05 | 5.0E-05  | 5.0E-05  | 5.0E-05  | 6.8E-05 |
| 20             | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 2.6E-05 | 2.6E-05 | 5.2E-05 | 5.2E-05 | 5.9E-05  | 5.9E-05  | 5.9E-05  | 7.8E-05 |
| 25             | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 3.0E-05 | 3.0E-05 | 6.0E-05 | 6.0E-05 | 6.8E-05  | 6.8E-05  | 6.8E-05  | 9.0E-05 |
| 30             | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 3.4E-05 | 3.4E-05 | 6.8E-05 | 6.8E-05 | 7.8E-05  | 7.8E-05  | 7.8E-05  | 1.0E-04 |
| 35             | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 3.8E-05 | 3.8E-05 | 7.6E-05 | 7.6E-05 | 8.8E-05  | 8.8E-05  | 8.8E-05  | 1.1E-04 |
| 40             | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 4.2E-05 | 4.2E-05 | 8.4E-05 | 8.4E-05 | 9.8E-05  | 9.8E-05  | 9.8E-05  | 1.2E-04 |
| 45             | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 2.2E-05 | 4.6E-05 | 4.6E-05 | 9.2E-05 | 9.2E-05 | 1.08E-04 | 1.08E-04 | 1.08E-04 | 1.3E-04 |
| 50             | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 5.0E-05 | 5.0E-05 | 1.0E-04 | 1.0E-04 | 1.18E-04 | 1.18E-04 | 1.18E-04 | 1.4E-04 |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR





PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
 VENT RELEASE STABLE  
 STABILITY 3. MPH  
 SPEED 147-168  
 147-168  
 168

| DISTANCE<br>MILES | NW  | NE  | E   | ESE | SE  | SSE | SW  | WSW | W   | WNW | NW  | NNW | N   |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9.0               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 36.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 37.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 39.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 41.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 42.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 43.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 44.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 45.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 46.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 47.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 49.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50.0              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

MAX  
 CONC 1.1E-04 6.8E-05 7.8E-05 3.3E-05 4.7E-05 3.7E-05 4.7E-05 1.8E-04 1.1E-04 8.6E-05 1.1E-04 1.2E-04 8.5E-05 6.1E-05 6.8E-05  
 DIST(MI) 2.0 3.0 4.0 4.0 3.5 3.0 2.0 1.5 1.5 2.0 2.0 2.0 1.5 2.0 3.0

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-23









PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/Q DEPLETED  
 VENT RELEASE HIGH FLOW  
 STABILITY UNSTABLE  
 SPEED 1. MPH

|      | 192-    | 213     | 214-    | 236     | 288     | 289-    | 282-    | 304-    | 327-    | 348-    | 12-     | 33      | 86      | 87-     | 78-     | 101     | 102-    | 124-    | 147-    | 168     | 189-    | 191     |         |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2.0  | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 | 8.5E-07 |
| 3.0  | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 |
| 4.0  | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 | 4.7E-06 |
| 5.0  | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| 6.0  | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| 7.0  | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| 8.0  | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| 9.0  | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| 10.0 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| 15.0 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| 20.0 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 | 6.0E-06 |
| 25.0 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 | 3.9E-06 |
| 30.0 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 | 2.7E-06 |
| 40.0 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 | 1.5E-06 |
| 50.0 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 |

|          | NE      | E       | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MAX      | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| CDMFC    | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| DIST(MI) | .6      | .6      | .6      | .4      | .4      | .4      | .4      | .3      | .4      | .4      | .4      | .3      | .7      |

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-26



PEACH BOTTOM ATOMIC POWER STATION  
 RELATIVE DISPERSION VALUES FOR EMERGENCY DOSE CALCULATION PROCEDURE

CHI/O DEPLETED  
 VENTY RELEASE  
 STABILITY UNSTABLE  
 SPEED 8 MPH

192- 214- 237- 258- 282- 304- 327- 348- 12- 34- 57- 78- 101- 102- 124- 147- 16C-  
 213 238 288 281 303 323 348 11 33 56 78 101 123 146 168 181

WIND DIRECTION RANGES

DOWN WIND SECTOR BEARING

| DISTANCE<br>MILES | NE       | E       | ESP     | SE      | SSE     | S       | SSW     | SW      | WSW     | W       | WNW     | NW      | NNW     | N       |
|-------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2.0               | 2.8E-06* | 2.8E-06 | 2.8E-06 | 2.8E-06 | 2.8E-06 | 1.3E-08 | 1.9E-08 | 2.2E-05 | 3.2E-08 | 2.6E-08 | 3.3E-08 | 2.8E-08 | 2.8E-08 | 2.8E-06 |
| 3.0               | 3.5E-06  | 3.5E-06 | 3.5E-06 | 3.5E-06 | 3.5E-06 | 1.4E-08 | 1.4E-08 | 2.4E-05 | 2.9E-08 | 2.6E-08 | 2.9E-08 | 2.6E-08 | 2.6E-08 | 3.5E-06 |
| 4.0               | 4.2E-06  | 4.2E-06 | 4.2E-06 | 4.2E-06 | 4.2E-06 | 1.5E-08 | 1.5E-08 | 2.6E-05 | 3.1E-08 | 2.8E-08 | 3.1E-08 | 2.8E-08 | 2.8E-08 | 4.2E-06 |
| 5.0               | 4.9E-06  | 4.9E-06 | 4.9E-06 | 4.9E-06 | 4.9E-06 | 1.6E-08 | 1.6E-08 | 2.8E-05 | 3.3E-08 | 3.0E-08 | 3.3E-08 | 3.0E-08 | 3.0E-08 | 4.9E-06 |
| 6.0               | 5.6E-06  | 5.6E-06 | 5.6E-06 | 5.6E-06 | 5.6E-06 | 1.7E-08 | 1.7E-08 | 3.0E-05 | 3.5E-08 | 3.2E-08 | 3.5E-08 | 3.2E-08 | 3.2E-08 | 5.6E-06 |
| 7.0               | 6.3E-06  | 6.3E-06 | 6.3E-06 | 6.3E-06 | 6.3E-06 | 1.8E-08 | 1.8E-08 | 3.2E-05 | 3.7E-08 | 3.4E-08 | 3.7E-08 | 3.4E-08 | 3.4E-08 | 6.3E-06 |
| 8.0               | 7.0E-06  | 7.0E-06 | 7.0E-06 | 7.0E-06 | 7.0E-06 | 1.9E-08 | 1.9E-08 | 3.4E-05 | 3.9E-08 | 3.6E-08 | 3.9E-08 | 3.6E-08 | 3.6E-08 | 7.0E-06 |
| 9.0               | 7.7E-06  | 7.7E-06 | 7.7E-06 | 7.7E-06 | 7.7E-06 | 2.0E-08 | 2.0E-08 | 3.6E-05 | 4.1E-08 | 3.8E-08 | 4.1E-08 | 3.8E-08 | 3.8E-08 | 7.7E-06 |
| 10.0              | 8.4E-06  | 8.4E-06 | 8.4E-06 | 8.4E-06 | 8.4E-06 | 2.1E-08 | 2.1E-08 | 3.8E-05 | 4.3E-08 | 4.0E-08 | 4.3E-08 | 4.0E-08 | 4.0E-08 | 8.4E-06 |
| 15.0              | 1.0E-05  | 1.0E-05 | 1.0E-05 | 1.0E-05 | 1.0E-05 | 2.4E-08 | 2.4E-08 | 4.4E-05 | 5.0E-08 | 4.6E-08 | 5.0E-08 | 4.6E-08 | 4.6E-08 | 1.0E-05 |
| 20.0              | 1.2E-05  | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 2.6E-08 | 2.6E-08 | 4.6E-05 | 5.2E-08 | 4.8E-08 | 5.2E-08 | 4.8E-08 | 4.8E-08 | 1.2E-05 |
| 25.0              | 1.4E-05  | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 2.8E-08 | 2.8E-08 | 4.8E-05 | 5.4E-08 | 5.0E-08 | 5.4E-08 | 5.0E-08 | 5.0E-08 | 1.4E-05 |
| 30.0              | 1.6E-05  | 1.6E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 3.0E-08 | 3.0E-08 | 5.0E-05 | 5.6E-08 | 5.2E-08 | 5.6E-08 | 5.2E-08 | 5.2E-08 | 1.6E-05 |
| 40.0              | 1.8E-05  | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 3.2E-08 | 3.2E-08 | 5.2E-05 | 5.8E-08 | 5.4E-08 | 5.8E-08 | 5.4E-08 | 5.4E-08 | 1.8E-05 |
| 50.0              | 2.0E-05  | 2.0E-05 | 2.0E-05 | 2.0E-05 | 2.0E-05 | 3.4E-08 | 3.4E-08 | 5.4E-05 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 2.0E-05 |

MAX  
 CONC 6.2E-06 6.2E-06 6.2E-06 6.2E-06 6.2E-06 2.0E-05 2.0E-05 2.0E-05 2.0E-05 2.0E-05 2.0E-05 2.0E-05 2.0E-05 2.0E-05 2.0E-05  
 DIST(MI) .4 .4 .4 .4 .4 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .4

NOTE: AN ASTERISK (\*) PRECEDES THE SITE BOUNDARY VALUE IN EACH SECTOR

TABLE NO. V-28



















ISOTOPIIC ABUNDANCE VS. DECAY TIME SINCE THE REACTOR SHUTDOWN

| Isotope | 0.0 hrs | 0.33   | 0.50   | 0.67   | 1.00   | 1.33   | 1.50   |
|---------|---------|--------|--------|--------|--------|--------|--------|
| Kr-83m  |         |        |        |        |        |        |        |
| Kr-85m  |         | 1.483  | 2.46   | 3.469  | 5.374  | 7.061  | 7.732  |
| Kr-85   |         |        |        |        |        |        |        |
| Kr-87   | 0.248   | 8.096  | 12.572 | 16.592 | 22.604 | 26.117 | 26.77  |
| Kr-88   | 0.173   | 6.241  | 10.196 | 14.158 | 21.287 | 27.143 | 29.272 |
| Kr-89   | 11.628  | 6.073  | 1.12   |        |        |        |        |
| Kr-90   | 71.58   |        |        |        |        |        |        |
| Xe-131m |         |        |        |        |        |        |        |
| Xe-133m |         |        |        |        |        |        | 0.112  |
| Xe-133  |         | 0.277  | 0.472  | 0.683  | 1.112  | 1.536  | 1.726  |
| Xe-135m | 0.532   | 8.688  | 9.442  | 8.722  | 5.945  | 3.436  | 2.465  |
| Xe-135  |         | 3.712  | 6.245  | 8.93   | 14.215 | 19.19  | 21.311 |
| Xe-137  | 12.044  | 13.412 | 3.607  |        |        |        |        |
| Xe-138  | 3.494   | 52.017 | 53.886 | 47.446 | 29.464 | 15.517 | 10.611 |

ISOTOPIC ABUNDANCE VS. DECAY TIME SINCE THE REACTOR SHUTDOWN

| Isotope | 1.67 hrs | 2.00   | 2.33   | 2.50   | 2.67   | 3.00   | 3.50   |
|---------|----------|--------|--------|--------|--------|--------|--------|
| Kr-83m  |          |        |        |        |        |        |        |
| Kr-85m  | 8.283    | 9.065  | 9.601  | 9.902  | 10.082 | 10.361 | 10.732 |
| Kr-85   |          |        |        |        |        |        |        |
| Kr-87   | 26.84    | 25.382 | 24.059 | 23.225 | 22.133 | 20.002 | 17.053 |
| Kr-88   | 30.878   | 32.798 | 33.712 | 34.24  | 34.329 | 34.239 | 33.894 |
| Kr-89   |          |        |        |        |        |        |        |
| Kr-90   |          |        |        |        |        |        |        |
| Xe-131m |          |        |        |        |        |        |        |
| Xe-133m | 0.122    | 0.141  | 0.156  | 0.165  | 0.172  | 0.186  | 0.207  |
| Xe-133  | 1.898    | 2.184  | 2.433  | 2.575  | 2.69   | 2.907  | 3.25   |
| Xe-135m | 1.73     | 0.833  | 0.388  | 0.262  |        |        |        |
| Xe-135  | 23.151   | 26.033 | 28.329 | 29.63  | 30.593 | 32.304 | 34.864 |
| Xe-137  |          |        |        |        |        |        |        |
| Xe-138  | 7.098    | 3.114  | 1.322  |        |        |        |        |

ISOTOPIC ABUNDANCE VS. DECAY TIME SINCE THE REACTOR SHUTDOWN

| <u>Isotope</u> | <u>4.00 hrs</u> | <u>4.50</u> | <u>5.00</u> | <u>5.50</u> | <u>6.00</u> | <u>7.00</u> | <u>8.00</u> |
|----------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Kr-83m         |                 |             |             |             |             |             |             |
| Kr-85m         | 11.039          | 11.283      | 11.465      | 11.588      | 11.657      | 11.647      | 11.472      |
| Kr-85          |                 |             |             |             |             |             |             |
| Kr-87          | 14.438          | 12.146      | 10.158      | 8.451       | 6.997       | 4.736       | 3.16        |
| Kr-88          | 33.32           | 32.547      | 31.608      | 30.532      | 29.352      | 26.787      | 24.1        |
| Kr-89          |                 |             |             |             |             |             |             |
| Kr-90          |                 |             |             |             |             |             |             |
| Xe-131m        |                 |             |             |             |             |             |             |
| Xe-133m        | 0.229           | 0.251       | 0.275       | 0.299       | 0.323       | 0.373       | 0.425       |
| Xe-133         | 3.607           | 3.979       | 4.363       | 4.759       | 5.165       | 6.01        | 6.894       |
| Xe-135m        |                 |             |             |             |             |             |             |
| Xe-135         | 37.367          | 39.794      | 42.132      | 44.372      | 46.506      | 50.447      | 53.949      |
| Xe-137         |                 |             |             |             |             |             |             |
| Xe-138         |                 |             |             |             |             |             |             |

ISOTOPIC ABUNDANCE VS. DECAY TIME SINCE THE REACTOR SHUTDOWN

| Isotope | 9.00 hrs | 10.0   | 20.0   | 30.0   | 40.0   | 50.0   | 60.0   |
|---------|----------|--------|--------|--------|--------|--------|--------|
| Kr-83m  | 11.169   | 10.768 | 5.474  | 20.095 | 0.672  |        |        |
| Kr-85m  |          |        |        |        |        |        |        |
| Kr-85   |          |        |        |        |        |        |        |
| Kr-87   | 2.084    | 1.361  |        |        |        |        |        |
| Kr-88   | 21.431   | 18.873 | 3.877  |        |        |        |        |
| Kr-89   |          |        |        |        |        |        |        |
| Kr-90   |          |        |        |        |        |        |        |
| Xe-131m |          |        |        |        |        |        | 0.105  |
| Xe-133m | 0.478    | 0.533  | 1.115  | 1.884  | 2.578  | 3.111  | 3.378  |
| Xe-133  | 7.816    | 8.776  | 20.464 | 35.921 | 52.874 | 68.638 | 80.155 |
| Xe-135m |          |        |        |        |        |        |        |
| Xe-135  | 57.022   | 59.688 | 69.03  | 60.1   | 43.876 | 28.25  | 16.362 |
| Xe-137  |          |        |        |        |        |        |        |
| Xe-138  |          |        |        |        |        |        |        |

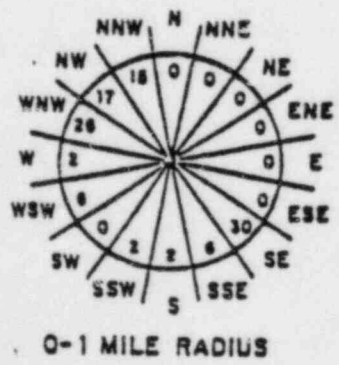
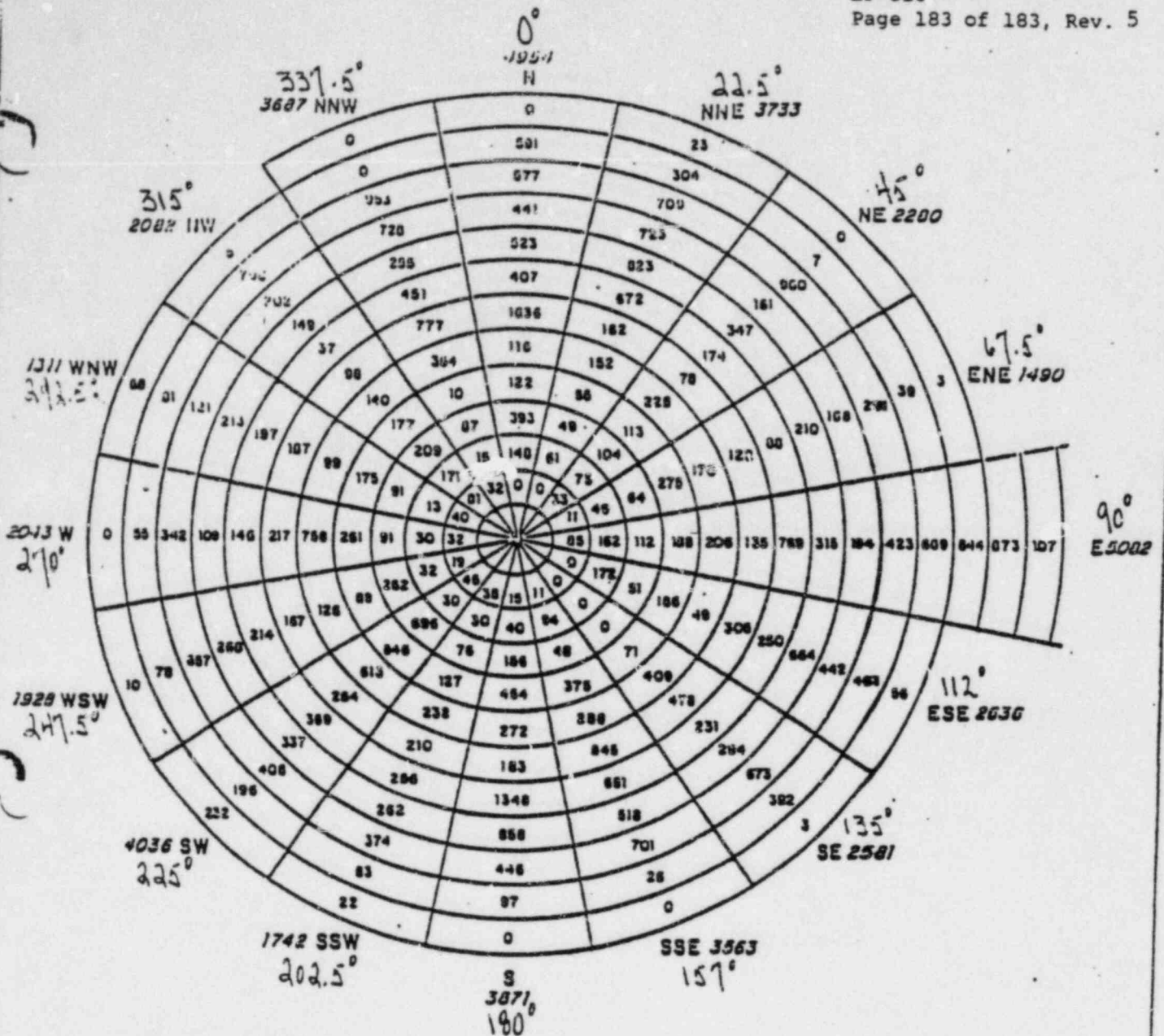


ISOTOPIC ABUNDANCE VS. DECAY TIME SINCE THE REACTOR SHUTDOWN

| Isotope | 70.0 hrs | 80.0  | 90.0   | 100.0  | 200.0  | 300.0  | 400.0  |
|---------|----------|-------|--------|--------|--------|--------|--------|
| Kr-83m  |          |       |        |        |        |        |        |
| Kr-85m  |          |       |        |        |        |        |        |
| Kr-85   |          |       |        |        |        |        |        |
| Kr-87   |          |       |        |        |        |        |        |
| Kr-88   |          |       |        |        |        |        |        |
| Kr-89   |          |       |        |        |        |        |        |
| Kr-90   |          |       |        |        |        |        |        |
| Xe-131m | 0.118    | 0.127 | 0.135  | 0.143  | 0.197  | 0.269  | 0.367  |
| Xe-133m | 3.431    | 3.347 | 3.193  | 3.046  | 1.49   | 0.723  | 0.349  |
| Xe-133  | 87.584   | 91.91 | 94.323 | 96.811 | 98.313 | 99.007 | 99.283 |
| Xe-135m |          |       |        |        |        |        |        |
| Xe-135  | 8.868    | 4.615 | 2.349  |        |        |        |        |
| Xe-137  |          |       |        |        |        |        |        |
| Xe-138  |          |       |        |        |        |        |        |

ISOTOPIC ABUNDANCE VS. DECAY TIME SINCE THE REACTOR SHUTDOWN

| <u>Isotope</u> | <u>500.0 hrs</u> | <u>600.0</u> | <u>700.0</u> | <u>800.0</u> | <u>900.0</u> | <u>999.0</u> |
|----------------|------------------|--------------|--------------|--------------|--------------|--------------|
| Kr-83m         |                  |              |              |              |              |              |
| Kr-85m         |                  |              |              |              |              |              |
| Kr-85          |                  |              |              | 0.101        | 0.174        | 0.297        |
| Kr-87          |                  |              |              |              |              |              |
| Kr-88          |                  |              |              |              |              |              |
| Kr-89          |                  |              |              |              |              |              |
| Kr-90          |                  |              |              |              |              |              |
| Xe-131m        | 0.459            | 0.678        | 0.919        | 1.244        | 1.581        | 2.261        |
| Xe-133m        | 0.168            |              |              |              |              |              |
| Xe-133         | 99.332           | 99.322       | 99.081       | 98.655       | 98.145       | 97.442       |
| Xe-135m        |                  |              |              |              |              |              |
| Xe-135         |                  |              |              |              |              |              |
| Xe-137         |                  |              |              |              |              |              |
| Xe-138         |                  |              |              |              |              |              |



| 0-2 MI | 0-5 MI | 0-10 MI | 2-5 MI | 5-10 MI | FULL EPZ |
|--------|--------|---------|--------|---------|----------|
| 548    | 7,683  | 36,985  | 7,135  | 29,302  | 47,019   |

POPULATION DISTRIBUTION BY  
COMPASS SECTOR - SUMMER DAY



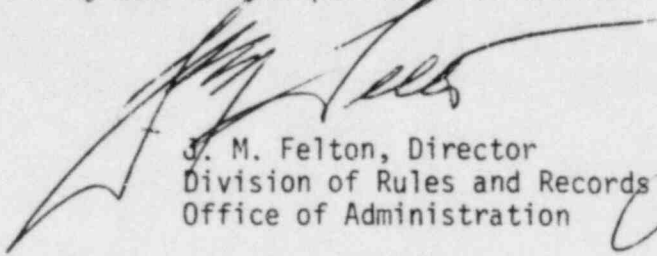
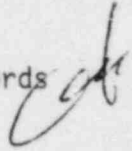
UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

October 29, 1984

50-277/278 Peach Bottom

MEMORANDUM FOR: Chief, Document Management Branch, TIDC  
FROM: Director, Division of Rules and Records, ADM  
SUBJECT: REVIEW OF UTILITY EMERGENCY PLAN DOCUMENTATION

The Division of Rules and Records has reviewed the attached document and has determined that it may now be made publicly available.

  
J. M. Felton, Director  
Division of Rules and Records  
Office of Administration 

Attachment: As stated