

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

September 3, 2002

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Serial No. 02-566
NAPS/MPW
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7


Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
REVISIONS TO EMERGENCY PLAN IMPLEMENTING PROCEDURES

Pursuant to 10 CFR 50.54(q), enclosed are recent revisions to North Anna Power Station Emergency Plan Implementing Procedures. The revisions do not implement actions that decrease the effectiveness of our Emergency Plan. The Emergency Plan and Implementing Procedures continue to meet the standards of 10 CFR 50.47(b).

Please update your manual by performing the actions described in Attachment 1, Tabulation of Changes.

Very truly yours,


D. A. Heacock
Site Vice President

Commitments Stated or Implied: None.

Enclosures

cc: U.S. Nuclear Regulatory Commission (2 copies)
Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

Mr. M. J. Morgan
NRC Senior Resident Inspector
North Anna Power Station

A045

**ATTACHMENT 1
TABULATION OF CHANGES**

**VIRGINIA ELECTRIC AND POWER COMPANY
REVISION TO NORTH ANNA POWER STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURES**

Enclosed are recent revisions to North Anna Power Station Emergency Plan Implementing Procedures (EPIP). Please take the following actions in order to keep your manual updated.

REMOVE AND DESTROY	DATED	INSERT	EFFECTIVE DATE
EPIP – 2.01, Rev. 24	09/26/01	EPIP – 2.01, Rev. 25	08/28/02
EPIP – 2.02, Rev. 14	01/29/99	EPIP – 2.02, Rev. 15	08/28/02
EPIP – 3.02, Rev. 19	10/01/99	EPIP – 3.02, Rev. 20	08/28/02
EPIP – 4.10, Rev. 10	04/28/98	EPIP – 4.10, Rev. 11	08/28/02

Emergency Plan Privacy and Proprietary Material has been removed. Reference Generic Letter No. 81-27.

NORTH ANNA POWER STATION
 LIST OF NAPS EMERGENCY PLAN IMPLEMENTATION PROCEDURES
 CHECK DMIS FOR LATEST DOCUMENT INFORMATION

DOCUMENT NUMBER	REV	APPROVAL **DATE**	EFFECT** **DATE**	DOCUMENT TITLE
EPIP-1.01	036	04/30/02	05/15/02	EMERGENCY MANAGER CONTROLLING PROCEDURE
EPIP-1.02	011	09/07/99	10/01/99	RESPONSE TO NOTIFICATION OF UNUSUAL EVENT
EPIP-1.03	014	09/07/99	10/01/99	RESPONSE TO ALERT
EPIP-1.04	014	09/07/99	10/01/99	RESPONSE TO SITE AREA EMERGENCY
EPIP-1.05	016	09/07/99	10/01/99	RESPONSE TO GENERAL EMERGENCY
EPIP-1.06	004	09/05/01	09/05/01	PROTECTIVE ACTION RECOMMENDATIONS
EPIP-2.01	025	08/13/02	08/28/02	NOTIFICATION OF STATE AND LOCAL GOVERNMENTS
EPIP-2.02	015	08/13/02	08/28/02	NOTIFICATION OF NRC
EPIP-3.02	020	08/13/02	08/28/02	ACTIVATION OF TECHNICAL SUPPORT CENTER
EPIP-3.03	012	12/20/93	01/01/94	ACTIVATION OF OPERATIONAL SUPPORT CENTER
EPIP-3.04	015	07/14/98	07/20/98	ACTIVATION OF LOCAL EMERGENCY OPERATIONS FACILITY
EPIP-3.05	001	09/07/99	10/01/99	AUGMENTATION OF EMERGENCY RESPONSE ORGANIZATION
EPIP-4.01	018	04/05/02	04/09/02	RADIOLOGICAL ASSESSMENT DIRECTOR CONTROLLING PROCEDURE
EPIP-4.02	012	07/25/00	08/02/00	RADIATION PROTECTION SUPERVISOR CONTROLLING PROCEDURE
EPIP-4.03	011	12/20/93	01/01/94	DOSE ASSESSMENT TEAM CONTROLLING PROCEDURE
EPIP-4.04	009	11/21/94	11/28/94	EMERGENCY PERSONNEL RADIATION EXPOSURE
EPIP-4.05	009	01/28/00	02/04/00	RESPIRATORY PROTECTION AND KI ASSESSMENT
EPIP-4.06	009	12/21/95	12/28/95	PERSONNEL MONITORING AND DECONTAMINATION
EPIP-4.07	014	09/29/00	10/06/00	PROTECTIVE MEASURES
EPIP-4.08	014	05/10/02	06/19/02	INITIAL OFFSITE RELEASE ASSESSMENT
EPIP-4.09	013	05/10/02	06/19/02	SOURCE TERM ASSESSMENT
EPIP-4.10	011	08/13/02	08/28/02	DETERMINATION OF X/Q
EPIP-4.13	009	09/29/00	10/06/00	OFFSITE RELEASE ASSESSMENT WITH ENVIRONMENTAL DATA

NORTH ANNA POWER STATION
LIST OF NAPS EMERGENCY PLAN IMPLEMENTATION PROCEDURES
CHECK DMIS FOR LATEST DOCUMENT INFORMATION

DOCUMENT NUMBER	REV	APPROVAL **DATE**	EFFECT** **DATE**	DOCUMENT TITLE
EPIP-4.14	007	12/20/93	01/01/94	INPLANT MONITORING
EPIP-4.15	011	02/18/00	02/28/00	ONSITE MONITORING
EPIP-4.16	014	02/18/00	02/28/00	OFFSITE MONITORING
EPIP-4.17	015	06/11/02	06/19/02	MONITORING OF EMERGENCY RESPONSE FACILITIES
EPIP-4.18	012	06/11/02	06/19/02	MONITORING OF LEOF
EPIP-4.21	008	12/20/93	01/01/94	EVACUATION AND REMOTE ASSEMBLY AREA MONITORING
EPIP-4.22	014	04/05/02	04/09/02	POST ACCIDENT SAMPLING OF CONTAINMENT AIR
EPIP-4.23	014	04/05/02	04/09/02	POST ACCIDENT SAMPLING OF REACTOR COOLANT
EPIP-4.24	012	08/02/02	08/15/02	GASEOUS EFFLUENT SAMPLING DURING AN EMERGENCY
EPIP-4.25	008	07/23/93	07/23/93	LIQUID EFFLUENT SAMPLING DURING AN EMERGENCY
EPIP-4.26	011	07/26/01	09/13/01	HIGH LEVEL ACTIVITY SAMPLE ANALYSIS
EPIP-4.28	007	01/09/97	01/14/97	TSC/LEOF RADIATION MONITORING SYSTEM
EPIP-4.30	005	04/05/02	04/09/02	USE OF MIDAS CLASS A MODEL
EPIP-4.31	003	06/20/94	06/20/94	USE OF MIDAS CLASS B MODEL
EPIP-4.33	003	11/28/00	11/30/00	HEALTH PHYSICS NETWORK COMMUNICATIONS
EPIP-4.34	002	02/18/00	02/28/00	FIELD TEAM RADIO OPERATOR INSTRUCTIONS
EPIP-5.01	011	12/11/96	12/17/96	TRANSPORTATION OF CONTAMINATED INJURED PERSONNEL
EPIP-5.03	016	02/18/00	02/28/00	PERSONNEL ACCOUNTABILITY
EPIP-5.04	009	08/02/02	08/15/02	ACCESS CONTROL
EPIP-5.05	013	06/25/96	07/02/96	SITE EVACUATION
EPIP-5.07	011	07/25/00	08/02/00	ADMINISTRATION OF RADIOPROTECTIVE DRUGS
EPIP-5.08	007	11/28/00	11/30/00	DAMAGE CONTROL GUIDELINE
EPIP-5.09	004	08/02/02	08/15/02	SECURITY TEAM LEADER CONTROLLING PROCEDURE

NORTH ANNA POWER STATION
LIST OF NAPS EMERGENCY PLAN IMPLEMENTATION PROCEDURES
CHECK DMIS FOR LATEST DOCUMENT INFORMATION

DOCUMENT NUMBER	REV	APPROVAL **DATE**	EFFECT** **DATE**	DOCUMENT TITLE
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EPIP-6.01	007	05/12/99	05/17/99	RE-ENTRY/RECOVERY GUIDELINE

VIRGINIA POWER
NORTH ANNA POWER STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURE

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS (With 3 Attachments)	REVISION 25
		PAGE 1 of 18

PURPOSE

To initially notify State and local governments of the declaration of an emergency and to provide status updates related to the event.

**LEVEL 2 DISTRIBUTION
This Document Should Be Verified
And Annotated To A Controlled Source
As Required to Perform Work**

ENTRY CONDITIONS

Any of the following:

1. An emergency has been declared.
2. Entry directed by Station Emergency Manager.

Approvals on File

Effective Date 08/28/02

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

- a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:
 - 1) Complete transmittal of current message.
 - 2) RETURN TO Step 3 to prepare new emergency message.
- b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:
 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 2 of 18

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
_____ 1	INITIATE PROCEDURE: <ul style="list-style-type: none"> • By: _____ Date: _____ Time: _____ Location: _____ 	
_____ 2	CHECK FIRST REPORT OF EMERGENCY FOR EVENT - REQUIRED	IF procedure previously initiated, <u>THEN</u> continue from step in effect identified during relief/turnover.
	<p>NOTE:</p> <ul style="list-style-type: none"> • The initial notification of any emergency classification must be completed within 15 minutes of declaring the emergency class. • Items 4 through 8 on Attachment 2 may be excluded from the first report of any emergency classification (including termination). • Attachment 1, Instructions for Completing Report of Emergency to State and Local Governments, may be referenced as needed. 	
_____ 3	RECORD INFORMATION ON ATTACHMENT 2 (REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS)	
_____ 4	CHECK EMERGENCY - REMAINS IN EFFECT	IF emergency terminated before message sent, <u>THEN</u> do the following: a) Record reason event terminated in Item 3. b) Record "State EOC-only portion of message not applicable" on bottom of Attachment 2 Page 2.
_____ 5	HAVE SEM/RM APPROVE REPORT (initial at top of Attachment 2)	

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

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3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

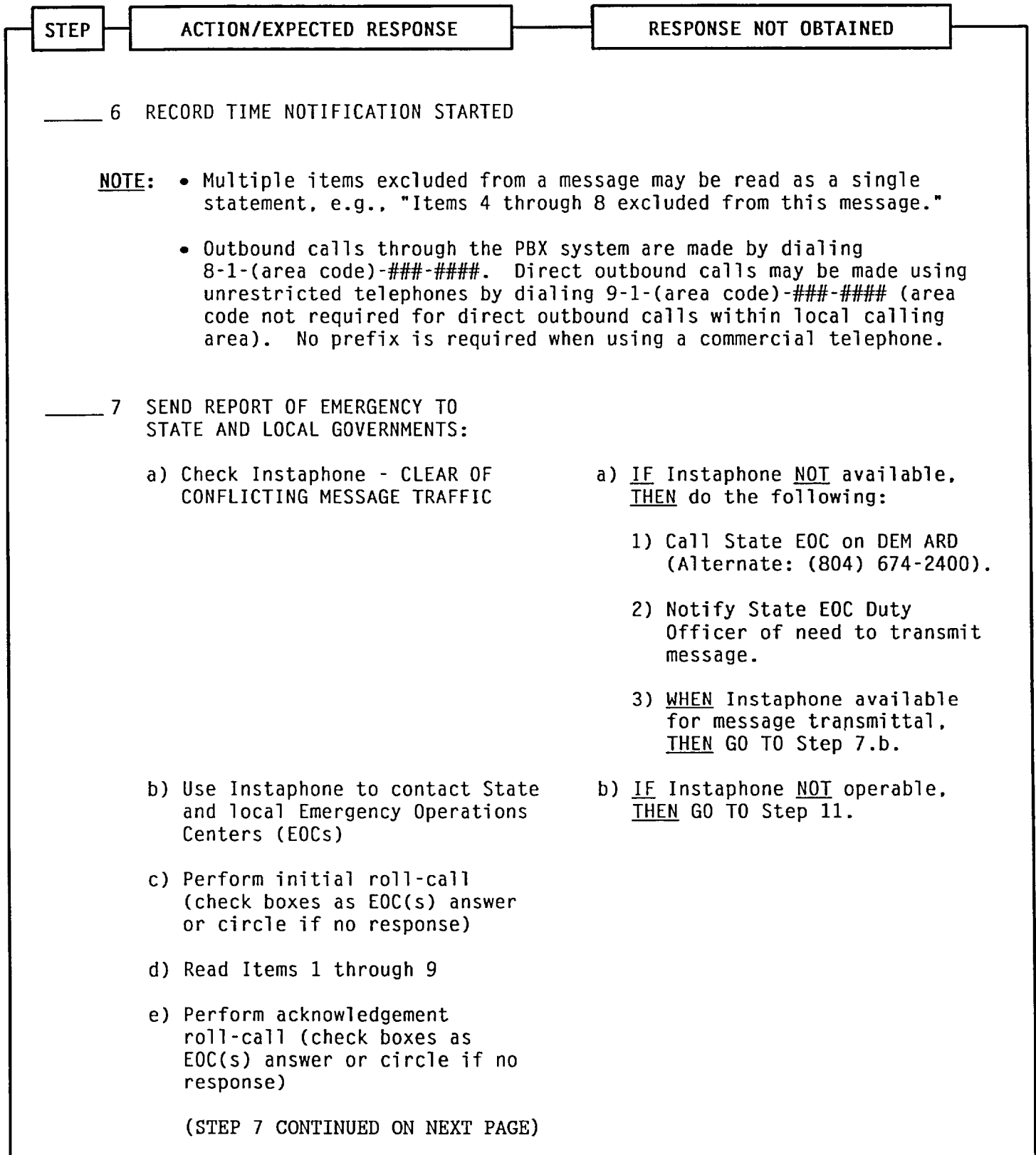
4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 3 of 18



CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

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3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

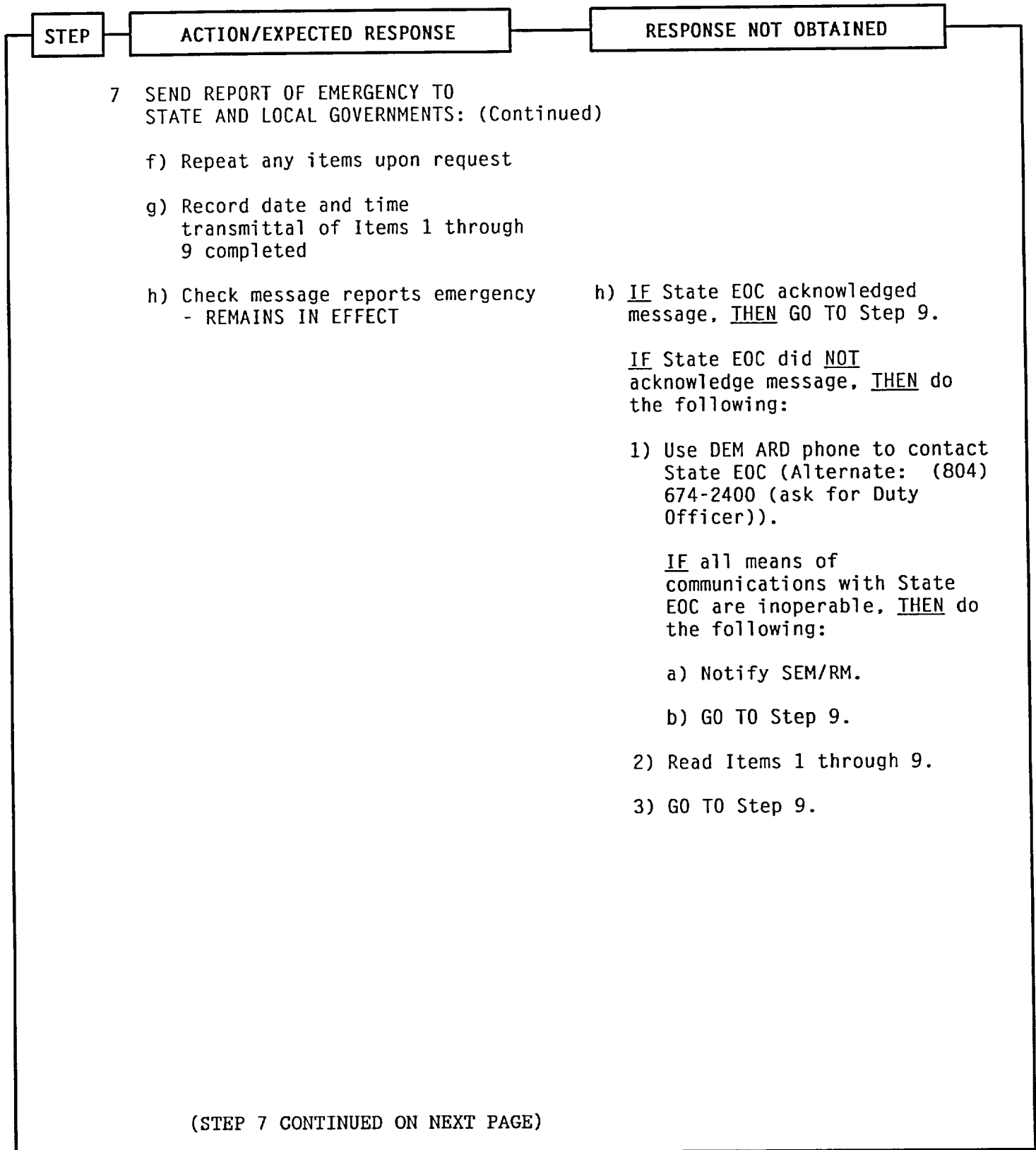
4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 4 of 18



CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

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2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 5 of 18

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

7 SEND REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS: (Continued)

i) Use DEM ARD phone to contact State EOC (Alternate: (804) 674-2400 (ask for Duty Officer))

i) IF all means of communications with State EOC are inoperable, THEN do the following:

- 1) Use Instaphone to transmit Item 10 to local EOCs.
- 2) Record the following on second page of Attachment 2:
 - "Transmitted Item 10 to local EOCs."
 - Date and time transmitted to each local EOC.
- 3) GO TO Step 9.

j) Check State EOC acknowledged message

j) Read Items 1 through 9.

k) Read Items 10 and 11

l) Consult with State EOC Duty Officer to determine desired update message schedule

m) Record the following at Item 12:

- Update message schedule
- State EOC Duty Officer's name

8 RECORD DATE AND TIME TRANSMITTAL OF ITEMS TO STATE EOC COMPLETE

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

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 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 6 of 18

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED										
9	VERIFY ALL LOCAL EOCs ANSWERED ACKNOWLEDGEMENT ROLL CALL	<p><u>IF</u> any EOC(s) did <u>NOT</u> answer acknowledgement roll-call, <u>THEN</u> do the following:</p> <p>a) Use telephone to call EOC(s) that did not answer.</p> <p>b) Refer to the table below for order of priority and list of local EOC phone numbers:</p> <table border="1" data-bbox="914 842 1521 1161"> <tr> <td>Louisa:</td> <td>(540) 967-1234 (local)</td> </tr> <tr> <td>Spotsylvania:</td> <td>(540) 582-7115</td> </tr> <tr> <td>Caroline:</td> <td>(804) 633-5555</td> </tr> <tr> <td>Orange:</td> <td>(540) 672-1234</td> </tr> <tr> <td>Hanover:</td> <td>(804) 537-6140</td> </tr> </table> <p>c) <u>IF</u> State EOC notified, <u>THEN</u> read Items 1 through 9.</p> <p><u>IF</u> NO communications with State EOC, <u>THEN</u> read Items 1 through 10.</p> <p>d) Record the following on Attachment 2:</p> <ul style="list-style-type: none"> • Method of contact. • Reason Instaphone failed (if known). • Date and time of contact. 	Louisa:	(540) 967-1234 (local)	Spotsylvania:	(540) 582-7115	Caroline:	(804) 633-5555	Orange:	(540) 672-1234	Hanover:	(804) 537-6140
Louisa:	(540) 967-1234 (local)											
Spotsylvania:	(540) 582-7115											
Caroline:	(804) 633-5555											
Orange:	(540) 672-1234											
Hanover:	(804) 537-6140											
10	GO TO STEP 12											

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

- a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:
 - 1) Complete transmittal of current message.
 - 2) RETURN TO Step 3 to prepare new emergency message.
- b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:
 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 7 of 18



NOTE: Other personnel may assist by making notifications simultaneously using other telephones.

- ____ 11 SEND ATTACHMENT 2 USING ALTERNATIVE MEANS:
- a) Call State EOC:
 - 1) Use DEM ARD (Alternate: (804) 674-2400, ask for EOC Duty Officer)
 - 2) Read entire Attachment 2
 - 3) Record date/time transmittal to State EOC complete
 - b) Call each local EOC and read Items 1 through 9:

Louisa:	(540) 967-1234 (local)
Spotsylvania:	(540) 582-7115
Caroline:	(804) 633-5555
Orange:	(540) 672-1234
Hanover:	(804) 537-6140

- c) Record date/time transmittal of Items 1 through 9 complete

- ____ 12 NOTIFY SEM/RM TRANSMITTAL WAS SENT
- ____ 13 KEEP ATTACHMENT 2 WITH THIS PROCEDURE

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

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 - 1) Complete transmittal of current message.
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 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25 <hr/> PAGE 8 of 18
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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

_____ 14 CHECK IF ITEM 11 ON REPORT OF
EMERGENCY TO STATE AND LOCAL
GOVERNMENTS INDICATES REPORT OF
RADIOLOGICAL CONDITIONS - REQUIRED

GO TO Step 17.

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

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NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

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NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25 <hr/> PAGE 9 of 18
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- NOTE:**
- The initial Report of Radiological Conditions must be transmitted to the State EOC (or State representatives in the LEOF/CEOF) as soon as possible following the release of radioactive material.
 - Follow-up reports should be issued approximately every 60 minutes or when there are changes in radiological conditions. Time should be measured from time of delivery, time facsimile sent, or time verbal transmittal completed.
 - The numbering sequence for Reports of Radiological Conditions (Attachment 3) starts at #1 for the first report issued and is separate from the numbering sequence for Reports of Emergency to State and Local Governments (Attachment 2).

15 GET REPORT OF RADIOLOGICAL CONDITIONS FOR THE STATE:

- | | |
|--|--|
| <p>a) Check if either of the following Radiological Status reports available:</p> <ul style="list-style-type: none"> • MIDAS Radiological Status report <p style="text-align: center;"><u>OR</u></p> <ul style="list-style-type: none"> • EPIP-4.03, DOSE ASSESSMENT TEAM CONTROLLING PROCEDURE, Attachment 1, Radiological Status | <p>a) Do the following:</p> <ol style="list-style-type: none"> 1) Determine from radiological assessment organization when report will be available. 2) Notify SEM/RM about delay. 3) <u>WHEN</u> Radiological Status report becomes available, <u>THEN</u> continue in this procedure. |
| <p>b) Get Radiological Status report from radiological assessment organization</p> | |
| <p>c) Check report - COMPLETE</p> | <p>c) <u>IF</u> blank items remain on Radiological Status report, <u>THEN</u> return report to radiological assessment organization for completion.</p> |

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25 <hr/> PAGE 9 of 18
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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

- NOTE:**
- The initial Report of Radiological Conditions must be transmitted to the State EOC (or State representatives in the LEOF/CEOF) as soon as possible following the release of radioactive material.
 - Follow-up reports should be issued approximately every 60 minutes or when there are changes in radiological conditions. Time should be measured from time of delivery, time facsimile sent, or time verbal transmittal completed.
 - The numbering sequence for Reports of Radiological Conditions (Attachment 3) starts at #1 for the first report issued and is separate from the numbering sequence for Reports of Emergency to State and Local Governments (Attachment 2).

15 GET REPORT OF RADIOLOGICAL CONDITIONS FOR THE STATE:

a) Check if either of the following Radiological Status reports available:

- MIDAS Radiological Status report

OR

- EPIP-4.03, DOSE ASSESSMENT TEAM CONTROLLING PROCEDURE, Attachment 1, Radiological Status

b) Get Radiological Status report from radiological assessment organization

c) Check report - COMPLETE

a) Do the following:

- 1) Determine from radiological assessment organization when report will be available.
- 2) Notify SEM/RM about delay.
- 3) WHEN Radiological Status report becomes available, THEN continue in this procedure.

c) IF blank items remain on Radiological Status report, THEN return report to radiological assessment organization for completion.

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

- a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:
 - 1) Complete transmittal of current message.
 - 2) RETURN TO Step 3 to prepare new emergency message.
- b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:
 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 10 of 18

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
16	<p>SEND REPORT OF RADIOLOGICAL CONDITIONS TO THE STATE TO EOC:</p> <ul style="list-style-type: none"> a) Attach Radiological Status report to Attachment 3 b) Follow Attachment 3 Part I, Instructions for North Anna Emergency Communicator c) Check Report of Radiological Conditions to the State - SENT VIA FACSIMILE MACHINE d) Allow 5 minutes for State EOC Duty Officer to verify receipt of message e) Check receipt of message - VERIFIED BY STATE EOC DUTY OFFICER f) Record Date/Time verified on Attachment 3 Part III Item 1 g) Notify SEM/RM transmittal - SENT h) Keep Attachment 3 with this procedure 	<ul style="list-style-type: none"> c) <u>IF</u> Radiological Status report communicated verbally or delivered, <u>THEN</u> GO TO Step 16.g. e) <u>IF</u> receipt of message <u>NOT</u> verified, <u>THEN</u> do the following: <ul style="list-style-type: none"> 1) Call State EOC on DEM ARD (Alternate: (804) 674-2400). 2) Ask State EOC Duty Officer if message received. 3) <u>IF</u> receipt of message verified, <u>THEN</u> GO TO Step 16.f. <p><u>IF</u> message <u>NOT</u> received, <u>THEN</u> do the following:</p> <ul style="list-style-type: none"> a) Follow Attachment 3 Part I Item 6 instructions. b) GO TO Step 16.g.

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

- a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:
 - 1) Complete transmittal of current message.
 - 2) RETURN TO Step 3 to prepare new emergency message.
- b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:
 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 11 of 18

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE: Follow-up reports of emergency conditions must be provided to State and local governments approximately every 60 minutes (from previous message notification start time) or when there are changes in emergency conditions, unless otherwise agreed upon with the State.

17 CHECK ANY OF THE FOLLOWING MESSAGE UPDATE CONDITIONS - EXISTS:

- Status of any of the following Report of Emergency items - CHANGED:

- Emergency class (including event termination)
- Offsite Assistance Required
- Site Evacuation
- Prognosis Worsening

- Radioactive Release
- Protective Action Recommendation

OR

- Updated Radiological Status report provided by radiological assessment organization

OR

- Follow-up report due IAW schedule established with State EOC Duty Officer

WHEN Report of Emergency message update conditions satisfied, THEN RETURN TO Step 3.

WHEN Report of Radiological Conditions message update conditions satisfied, THEN RETURN TO Step 15.

IF termination message has been sent, THEN GO TO Step 27.

18 RETURN TO APPLICABLE STEP AS INDICATED BELOW:

Report of Emergency to State and Local Governments	RETURN TO Step 3
Report of Radiological Conditions to the State	RETURN TO Step 15

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

- a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:
 - 1) Complete transmittal of current message.
 - 2) RETURN TO Step 3 to prepare new emergency message.
- b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:
 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25 <hr/> PAGE 12 of 18
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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

- NOTE:**
- Data may be obtained from meteorological panel charts (via TSC staff communicating with Control Room when PCS not available) or PCS (by selecting WEATHER from Group Display Menu).
 - Both the PCS WEATHER Group Display and the PCS ERDS RAD / MET Group Display contain meteorological information averaged over the previous 15 minutes.

____ 19 CHECK ON-SITE METEOROLOGICAL INFORMATION - AVAILABLE

IF on-site data NOT available, THEN do the following:

- a) Get regional information from one of the following:
 - Company Weather Center: (804) 273-3025.
 - National Weather Service (NWS): (800) 737-8624.
 - Have HP initiate EPIP-4.10, DETERMINATION OF X/Q.
- b) Give meteorological information to requestor.
- c) RETURN TO procedure step in effect.

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

- a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:
 - 1) Complete transmittal of current message.
 - 2) RETURN TO Step 3 to prepare new emergency message.
- b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:
 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 13 of 18



____ 20 GET ON-SITE METEOROLOGICAL INFORMATION AS REQUESTED:

a) Refer to specified step(s) to acquire requested information:

Temperature	Step 21
Wind Speed	Step 22
Wind Direction	Step 23
Affected Sectors	Steps 23 and 24
Stability Class	Step 25

b) Give meteorological information to requestor

c) RETURN TO procedure step in effect

____ 21 GET TEMPERATURE FROM MAIN TOWER TEMPERATURE INDICATOR

NOTE: Primary source of wind speed is the Main Tower Lower Level indicator. Alternates sources are (1) Backup Tower, and (2) Main Tower Upper Level.

____ 22 GET WIND SPEED

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:

- 1) Complete transmittal of current message.
- 2) RETURN TO Step 3 to prepare new emergency message.

b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:

- Update current message to include changed condition(s).
- RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 14 of 18

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

- NOTE:**
- An approximate average wind direction for previous 15 minutes should be determined.
 - Primary source of wind direction is the Main Tower Lower indicator. Alternates sources are (1) Backup Tower, and (2) Main Tower Upper Level.
 - Wind direction is always given as the compass point the wind blows from. Example: Wind direction is from East North East (ENE).

23 GET WIND DIRECTION IN TERMS OF COMPASS POINT WIND BLOWING FROM:

DEGREES	COMPASS POINT	DEGREES	COMPASS POINT	DEGREES	COMPASS POINT
0-11	N	192-214	SSW	350-371	N
12-34	NNE	215-236	SW	372-394	NNE
35-56	NE	237-259	WSW	395-416	NE
57-79	ENE	260-281	W	417-439	ENE
80-101	E	282-304	WNW	440-461	E
102-124	ESE	305-326	NW	461-484	ESE
125-146	SE	327-349	NNW	485-506	SE
147-169	SSE			507-529	SSE
170-191	S			530-540	S

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

- a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:
 - 1) Complete transmittal of current message.
 - 2) RETURN TO Step 3 to prepare new emergency message.
- b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:
 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 15 of 18

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
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NOTE: Downwind sectors are recorded using alphabetic designations.

_____ 24 DETERMINE DOWNWIND SECTORS:

COMPASS POINT	DOWNWIND SECTORS	COMPASS POINT	DOWNWIND SECTORS
N	H - J - K	S	R - A - B
NNE	J - K - L	SSW	A - B - C
NE	K - L - M	SW	B - C - D
ENE	L - M - N	WSW	C - D - E
E	M - N - P	W	D - E - F
ESE	N - P - Q	WNW	E - F - G
SE	P - Q - R	NW	F - G - H
SSE	Q - R - A	NNW	G - H - J

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

- a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:
 - 1) Complete transmittal of current message.
 - 2) RETURN TO Step 3 to prepare new emergency message.
- b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:
 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 16 of 18

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

- NOTE:**
- Main Tower Delta T is the preferred source of stability class. Sigma Theta (Backup Tower) is the secondary source.
 - The value closer to "G" should be used if unable to distinguish Delta T or Sigma Theta value.
 - Numerical ranges presented below for Delta T and Sigma Theta are less than the range of the chart recorder and indicator in the Control Room. Indications are not expected to read outside the ranges found on these tables.

_____ 25 DETERMINE STABILITY CLASS:

MAIN TOWER DELTA T		BACKUP TOWER SIGMA THETA	
DELTA T (°F)	STABILITY CLASS	SIGMA THETA (°)	STABILITY CLASS
≤ -1.31	= A	≥ 22.5	= A
-1.30 to -1.18	= B	22.4 to 17.5	= B
-1.17 to -1.04	= C	17.4 to 12.5	= C
-1.03 to -0.35	= D	12.4 to 7.5	= D
-0.34 to +1.04	= E	7.4 to 3.8	= E
+1.05 to +2.77	= F	3.7 to 2.1	= F
> +2.77	= G	< 2.1	= G

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

- a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:
 - 1) Complete transmittal of current message.
 - 2) RETURN TO Step 3 to prepare new emergency message.
- b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:
 - Update current message to include changed condition(s).
 - RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

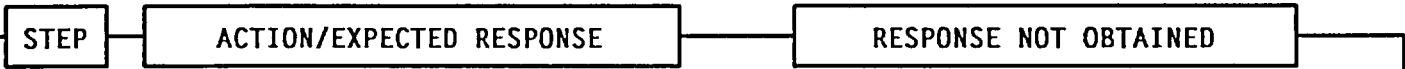
4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25
		PAGE 17 of 18



NOTE: Responsibilities may be transferred to relief within a facility or to another facility, e.g., Control Room to TSC, Control Room to LEOF or CEOF, or TSC to LEOF or CEOF.

- 26 TRANSFER RESPONSIBILITY FOR STATE/LOCAL NOTIFICATIONS:
- a) Notify SEM (or RM if in LEOF/CEO)
 - b) Tell relief Emergency Communicator about current event status
 - c) Review most recently completed Attachments 2 and 3 with relief
 - d) Tell relief Emergency Communicator when next notification is due
 - e) Provide this procedure and all attachments or send copies of attachments to relief
 - f) Have relief/turnover recorded in event log
 - g) Check - INTERFACILITY TURNOVER HAS BEEN COMPLETED

g) RETURN TO step in effect prior to relief.

CONTINUOUS ACTION PAGE FOR EPIP-2.01

1. REPORT OF EMERGENCY CONDITION CHANGE CRITERIA

WHEN emergency conditions change (e.g., classification, event termination, offsite assistance, site evacuation, worsening prognosis, release of radioactive material, Protective Action Recommendation), THEN do one of the following:

a. IF preparation of a new/revised message will prevent timely transmittal of an initial message reporting an emergency class (i.e., within 15 minutes of classification), THEN do the following:

- 1) Complete transmittal of current message.
- 2) RETURN TO Step 3 to prepare new emergency message.

b. IF new/revised message can be prepared without delaying timely transmittal of an initial message reporting an emergency class, THEN do one the following:

- Update current message to include changed condition(s).
- RETURN TO Step 3 to prepare new emergency message.

2. REPORT OF EMERGENCY UPDATE CRITERIA

WHEN scheduled Report of Emergency to State and Local Governments - DUE, THEN RETURN TO Step 3 to prepare new emergency message.

NOTE: Transmittal of a Report of Emergency to State and Local Governments takes precedence over preparing a new radiological status message, responding to requests for meteorological information and turning-over duties to relief.

3. REPORT OF RADIOLOGICAL STATUS CONDITION CHANGE CRITERIA

WHEN updated Radiological Status report provided by radiological assessment organization, THEN RETURN TO Step 15 to prepare new radiological status message.

4. METEOROLOGICAL INFORMATION REQUEST CRITERIA

IF requested to acquire on-site meteorological information, THEN GO TO Step 19.

5. SHIFT RELIEF OR INTERFACILITY TURNOVER CRITERIA

WHEN shift relief or interfacility turnover occurs, THEN GO TO Step 26.

NUMBER EPIP-2.01	PROCEDURE TITLE NOTIFICATION OF STATE AND LOCAL GOVERNMENTS	REVISION 25 PAGE 18 of 18
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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

____ 27 TERMINATE PROCEDURE:

- Give EPIP-2.01, forms and other applicable records to the Control Room STA (TSC Emergency Procedures Coordinator or EOF Services Coordinator)

• Completed by: _____

Date: _____

Time: _____

-END-

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.01	INSTRUCTIONS FOR COMPLETING REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS	25
ATTACHMENT		PAGE
1		1 of 7

Form Field Instructions for Preparing Form:

Approval (SEM or RM) Leave blank. (The Station Emergency Manager (SEM) or Recovery Manager (RM) signs/initials this space after message is drafted.)

Message # Record sequential message number on pages 1 and 2.

A single numbering sequence is used for Reports of Emergency to State and Local Governments (Attachment 2) from the initial classification until the Emergency Plan is exited. The numbering sequence for Reports of Radiological Conditions to the State (Attachment 3) is separate.

Notification Start Time Leave blank. (Enter notification start time when beginning transmittal of the approved message.)

Location Check off facility from which notification will be made.

Roll Call Leave blank. (Check off recipients of the emergency message when they answer the roll call.)

NOTE: • Information to complete Items 1-2 and 4-7 obtained from SEM/RM.

• Items 4, 5, 6, 7 and/or 8 are optional for a message reporting initial entry into the Emergency Plan or an emergency class change, including emergency termination and may be checked 'Excluded from this message.'

• Inclusion of optional items, e.g., Item 6, Evacuation of onsite personnel, should be considered when it can result in avoiding an immediate follow-up message.

Item 1 **Emergency Class.**

IF message initial or follow-up report, THEN do the following:

- a. Check block for highest applicable emergency class.
- b. Enter time (0001-2400) and date of declaration.

IF initial message is also a termination report, THEN record time of termination Item 3.

IF message emergency termination report, THEN do the following:

- a. Check Emergency Terminated block.
- b. Complete Items 2, 3 and 9.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.01	INSTRUCTIONS FOR COMPLETING REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS	25
ATTACHMENT 1		PAGE 2 of 7

Form Field

Instructions for Preparing Form:

Item 2

Release of radioactive material.

The SEM/RM determines whether a release of radioactive material is occurring, has occurred, has occurred and has been terminated, or is projected to occur based on plant indications and/or consultation with the RAD/RAC. For the purposes of emergency messages, release refers to a radiological release attributable to the emergency event.

Item 3

Remarks / Description of event.

Write Remarks / Description of event in plain language. Avoid technical jargon, abbreviations and acronyms.

Explain any change in the prognosis of situation (Item 7) reported in the previous message.

IF Item 2 indicated a radiological release is occurring or has occurred, THEN remarks should be entered placing the release in context, e.g., release is estimated to be confined to the site, release estimated to be within normal plant limits, site boundary dose rates are below offsite protective action levels.

Avoid repeating Remarks / Description of event from the previous message.

The description should describe current conditions at the time the report approved by the SEM/RM.

Item 4

Assistance requested.

[] Excluded from this message may be checked for the initial report of any emergency class only (including termination).

This item documents requests that have been made for on-site assistance from off-site organizations such as from fire departments, rescue squads or law enforcement agencies, including local law enforcement, Virginia State Police, Federal Bureau of Investigation, etc.). This item is NOT for requesting assistance. A check block for other off-site organizations and space to record a description of the off-site organization is provided, e.g., U.S. Department of Energy.

Continue to record requests for assistance until the request has been canceled or off-site assistance has been released. For an ambulance, continue to record request for assistance until the ambulance has been released from the hospital.

NUMBER	ATTACHMENT TITLE INSTRUCTIONS FOR COMPLETING REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS	REVISION
EPIP-2.01		25
ATTACHMENT		PAGE
1		3 of 7

Form Field

Instructions for Preparing Form:

Item 5

Emergency Response Actions Underway.

[] Excluded from this message may be checked for the initial report of any emergency class only (including termination).

Check blocks are provided for the following:

[] Station monitoring teams dispatched offsite (teams may be dispatched for any emergency classification, but dispatch is generally required at the Site Area Emergency and General Emergency classifications)

[] Station emergency personnel called in (unless special circumstances are involved, station emergency personnel are called-in at an Alert or higher emergency class, but may be called-in for a Notification of Unusual Event)

[] Other (examples of other emergency response actions include dispatch of damage control teams, relocation of personnel from selected areas, etc.)

Item 6

Evacuation of onsite personnel.

[] Excluded from this message may be checked for the initial report of any emergency class only (including termination).

The Remote Assembly Area is selected in accordance with EPIP-5.05, SITE EVACUATION.

An "Other" check block is provided in case personnel are evacuated to different location, e.g., local evacuation assembly center.

Early release of personnel, i.e., non-essential personnel are sent home early, is reported in Item 3, Remarks / Description of event.

Continue to record evacuation of onsite personnel until evacuated personnel released from the applicable Remote Assembly Area.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.01	INSTRUCTIONS FOR COMPLETING REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS	25
ATTACHMENT		PAGE
1		4 of 7

Form Field

Instructions for Preparing Form:

NOTE: Changes in the prognosis of situation should be explained in Item 3, Remarks / Description of event.

Item 7

Prognosis of situation.

[] Excluded from this message may be checked for the initial report of any emergency class only (including termination).

The "Other" check block can be used to provide an indication of anticipated event termination, e.g., emergency will be terminated when unit reaches cold shutdown at or about 1700 hours.

Item 8

Meteorological data.

[] Excluded from this message may be checked for the initial report of any emergency class only (including termination).

[] Not available may be checked when waiting for meteorological information will delay transmission of a message. Efforts to obtain meteorological data from alternative sources should not delay sending emergency messages.

Check [] Based on onsite measurements when meteorological information is acquired from onsite instruments.

Onsite measurements may be acquired from any of the following:

- PCS WEATHER Group Display (15-minute average)
- PCS ERDS RAD / MET Group Display (15-minute average)
- Control Room meteorological panel charts (approximate average for previous 15 minutes) (communicate with Control Room staff when PCS not available in other facilities)

[Instructions for Item 8, Meteorological data, continued on following page.]

NUMBER	ATTACHMENT TITLE	REVISION
EGIP-2.01	INSTRUCTIONS FOR COMPLETING REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS	25
ATTACHMENT		PAGE
1		5 of 7

Form Field Instructions for Preparing Form:

Item 8
[continued]

Meteorological data.

Multiple indications of wind direction and wind speed are available. The priority for using these indications is:

- 1 Main Tower Lower Level
- 2 Backup Tower
- 3 Main Tower Upper Level

Check [] Based on offsite regional data when onsite measurements are NOT available. Regional wind speed and wind direction data may be obtained from the following in the order indicated:

- 1 Company Weather Center, (804) 273-3025
- 2 National Weather Service (NWS), (800) 737-8624

Use the following table to convert indicated degree reading to compass point wind blowing from.

DEGREES	COMPASS POINT
0-11 or 350-371	N (NORTH)
12-34 or 372-394	NNE (NORTH NORTHEAST)
35-56 or 395-416	NE (NORTHEAST)
57-79 or 417-439	ENE (EAST NORTHEAST)
80-101 or 440-461	E (EAST)
102-124 or 462-484	ESE (EAST SOUTHEAST)
125-146 or 485-506	SE (SOUTHEAST)
147-169 or 507-529	SSE (SOUTH SOUTHEAST)
170-191 or 530-540	S (SOUTH)
192-214	SSW (SOUTH SOUTHWEST)
215-236	SW (SOUTHWEST)
237-259	WSW (WEST SOUTHWEST)
260-281	W (WEST)
282-304	WNW (WEST NORTHWEST)
305-326	NW (NORTHWEST)
327-349	NNW (NORTH NORTHWEST)

Record wind direction in compass point wind is blowing from.

Record wind speed.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.01	INSTRUCTIONS FOR COMPLETING REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS	25
ATTACHMENT 1		PAGE 6 of 7

Form Field Instructions for Preparing Form:

Item 9 **Emergency Communicator identification.**

Enter name of Emergency Communicator.

Roll Call Leave blank. (Check off recipients of the emergency message when they answer the roll call.)

Message Close-Out Leave blank. (Check off facility from which notification was made and enter date/time after transmitting Items 1-9.)

Item 10 **Recommended offsite protective actions.**

IF Item 1 indicates the emergency class is a Notification of Unusual Event, Alert or Site Area Emergency, THEN check None.

IF Item 1 indicates the emergency class is a General Emergency, THEN copy recommended offsite protective action from EPIP-1.06, PROTECTIVE ACTION RECOMMENDATION, Attachment 3, in Item 10.

Item 11 **Report of Radiological Conditions.**

IF Item 2 indicates a release of radioactive material has NOT occurred and is NOT projected, THEN check We will not issue a Report of Radiological Conditions.

IF a Report of Radiological Conditions is required AND all the following conditions are met:

- LEOF (or CEOF) - RESPONSIBLE FOR STATE NOTIFICATIONS
- Department of Emergency Management - PRESENT
- Department of Health (Radiological Health Programs) representative - PRESENT

THEN check We will provide the Report of Radiological Conditions to the State representatives in the LEOF (CEOF).

IF a Report of Radiological Conditions is required AND has to be transmitted to the State EOC, THEN check We will transmit a Report of Radiological Conditions to the State EOC.

NUMBER EPIP-2.01	ATTACHMENT TITLE INSTRUCTIONS FOR COMPLETING REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS	REVISION 25
ATTACHMENT 1		PAGE 7 of 7

Form Field

Instructions for Preparing Form:

Item 12

Update schedule and name of State EOC Duty Officer.

Leave blank. (Update schedule and identification of State EOC Duty Officer is determined in consultation with the State EOC Duty Officer after message is transmitted.)

Message
Close-Out

Leave blank. (Check off facility from which notification was made and enter date/time after transmitting Items 10-12.)

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.01	REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS	25
ATTACHMENT		PAGE
2		1 of 2

APPROVAL: (SEM or RM): _____: MESSAGE # _____: TIME NOTIFICATION STARTED: _____

This is North Anna Power Station Control Room TSC LEOF CEOF. Standby for a roll-call followed by an emergency message. Use a Report of Emergency form to copy this message. (Conduct a roll-call and check boxes as each party answers)

- Louisa County State EOC Orange County
 Spotsylvania County Hanover County Caroline County

The emergency message is as follows: (READ SLOWLY)

Item 1: Emergency Class:

<input type="checkbox"/> Notification of Unusual Event <input type="checkbox"/> Site Area Emergency <input type="checkbox"/> Alert <input type="checkbox"/> General Emergency	Declared at _____ on _____ (24-hr time) (date)
--	--

Emergency Terminated

Item 2: Release of radioactive material:

- Has NOT occurred and is NOT projected Is presently occurring
 Has occurred and is now terminated Is projected to occur

Item 3: Remarks / Description of event: _____

NOTE: Items 4 - 8 may be excluded from initial message reporting any emergency class (including termination).

Item 4: Assistance requested: Excluded from this message
 None
____ (#) Fire Units from _____
____ (#) Police Units from _____
____ (#) Rescue Units from _____
 Other _____

Item 5: Emergency response actions underway: Excluded from this message
 None
 Station monitoring teams dispatched offsite
 Station emergency personnel called in
 Other _____

Item 6: Evacuation of onsite personnel: Excluded from this message
 No
 Yes, evacuated to: Primary Remote Assembly Area
 Secondary Remote Assembly Area
 Other _____

(ATTACHMENT 2 CONTINUED ON NEXT PAGE)

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.01	REPORT OF EMERGENCY TO STATE AND LOCAL GOVERNMENTS	25
ATTACHMENT		PAGE
2		2 of 2

MESSAGE # _____

Item 7: Prognosis of situation: Excluded from this message
 Improving Stable
 Worsening Other _____

Item 8: Meteorological data is: Excluded from this message
 Based on onsite measurements; Based on offsite regional data;
 Wind direction is from the _____; Wind speed is _____ mph
 Not available

Item 9: This is (name) _____/Emergency Communicator.
Please acknowledge receipt of this message. (Conduct roll-call and check boxes)

Louisa County State EOC Orange County
 Spotsylvania County Hanover County Caroline County

This is North Anna Power Station Control Room TSC LEOF CEOF out at _____ on _____.
(24-hr time) (date)

NOTE: The remainder of this report is not transmitted when the message reports emergency termination. When transmitted, the following information is for state use only. Transmit to State EOC using the DEM ARD.

This is North Anna Power Station Control Room TSC LEOF CEOF continuing the emergency message.

Item 10: Recommended offsite protective actions are:

None

Standard: Evacuate 360° from 0 miles to 5 miles.

Expanded:

Evacuate 360° from 0 miles to 5 miles.
 Evacuate 360° from 5 miles to _____ miles.
 Evacuate sectors _____ from _____ miles to _____ miles.
 Shelter 360° from _____ miles to _____ miles.
 Shelter sectors _____ from _____ miles to _____ miles.
 Shelter unaffected sectors from _____ miles to _____ miles.

Item 11: We will transmit a Report of Radiological Conditions to the State EOC.
 We will provide the Report of Radiological Conditions to the State representatives in the LEOF (CEOF).
 We will not issue a Report of Radiological Conditions.

Item 12: Update schedule: 60 minute; Other _____

Name of State EOC Duty Officer: _____

This is North Anna Power Station Control Room TSC LEOF CEOF out at _____ on _____.
(24-hr time) (date)

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.01	REPORT OF RADIOLOGICAL CONDITIONS TO THE STATE	25
ATTACHMENT 3		PAGE 1 of 1

PART I. Instructions for North Anna Emergency Communicator:

1. Check name of facility: [] Control Room [] TSC [] Local EOF [] Central EOF

2. Record Message #: ___ Communicator's name: _____ Call-back #: () - _____

3. Check which report is attached and record the report number and run time (as appropriate):

___ MIDAS Radiological Status computer printout (2 pages) Report # ___ Run Time ___
 ___ Radiological Status attachment from EPIP-4.03 (1 page) Report # ___

4. Have Station Emergency Manager (SEM) / Recovery Manager (RM) approve transmittal:

APPROVED FOR TRANSMITTAL: _____ (SEM / RM initials) DATE: ___ / ___ / ___ TIME: ___ : ___

5. IF report can be delivered to both VDEM AND VDH staff in EOF, THEN GO TO PART I, ITEM 6.
IF report will be sent by facsimile, THEN notify State EOC Report of Radiological Conditions will be sent by facsimile (Use DEM ARD or (804) 674-2400) and request receipt confirmation.

6. Deliver report to both VDEM AND VDH staff in EOF:

- Date/Time Message Delivered to VDEM Representative in Local/Central EOF: ___ / ___ / ___ : ___
- Date/Time Message Delivered to VDH Representative in Local/Central EOF: ___ / ___ / ___ : ___
- Record N/A by Part II and Part III below.

IF report will be sent by facsimile, THEN ask facsimile machine operator to transmit this message.

IF transmittal of report by facsimile NOT achievable, THEN do the following:

- Notify State EOC using DEM ARD or call (804) 674-2400
- Identify yourself and your location
- Ask EOC Duty Officer to use a Report of Radiological Conditions form to copy message
- Read the attached report
- Record when message transmittal completed: Date/Time Message Completed: ___ / ___ / ___ : ___
- Record N/A by Part II and Part III below.

PART II. Instructions for Facsimile Machine Operator:

1. Record Facsimile Operator's name : _____ Date/Time Sent: ___ / ___ / ___ : ___

2. Transmit this message to State EOC facsimile machine (804) 674-2419.

IF facsimile transmission NOT successful, THEN RETURN message to Emergency Communicator.

3. Return original report to State and Local Emergency Communicator.

PART III. Instructions for State EOC Duty Officer:

1. Notify North Anna Emergency Communicator report received. Date/Time Verified: ___ / ___ / ___ : ___
 (Use DEM ARD or see PART I, Item 2 above for call-back number). Receipt Verification

2. Forward message to EOC Operations Officer for distribution to State Radiological Health Programs and Information & Planning representatives.

VIRGINIA POWER
NORTH ANNA POWER STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURE

NUMBER EPIP-2.02	PROCEDURE TITLE NOTIFICATION OF NRC (With 3 Attachments)	REVISION 15
		PAGE 1 of 5

PURPOSE

1. To notify the NRC of an emergency and to provide supplemental status information.
2. To activate the Emergency Response Data System (ERDS) upon an Alert or higher emergency classification.

LEVEL 2 DISTRIBUTION
This Document Should Be Verified
And Annotated To A Controlled Source
As Required to Perform Work

ENTRY CONDITIONS

Any one of the following:

1. Emergency is declared.
2. Entry directed by Station Emergency Manager.

Approvals on File

Effective Date 8/28/02

NUMBER EPIP-2.02	PROCEDURE TITLE NOTIFICATION OF NRC	REVISION 15
		PAGE 2 of 5



- NOTE:**
- NRC notification shall be made immediately after notification of State and local governments and in all cases within 1 hour from the time of event declaration.
 - ERDS shall be activated as soon as possible and in all cases within 1 hour after declaring an Alert or higher classification.
 - The NRC may require that a continuous open communication channel be maintained throughout the event.

___ 1 INITIATE PROCEDURE:

- By: _____
- Date: _____
- Time: _____

- NOTE:**
- Items appearing on Attachment 1, NRC Event Notification Worksheet, may be marked "N/A" if they do not pertain to the incident.
 - Items 10 and 21 of Attachment 1 are normally completed during communications with the NRC.

___ 2 CHECK EVENT DECLARATION - NOTIFICATION OF UNUSUAL EVENT

IF classification - ALERT OR HIGHER, THEN do the following:

- Complete the following items on Attachment 1:
 - Items 1 - 9
 - Items 11 - 20
 - Items 22 - 33
- Activate ERDS using Attachment 3, ERDS Operation.
- GO TO Step 4.

NUMBER EPIP-2.02	PROCEDURE TITLE NOTIFICATION OF NRC	REVISION 15
		PAGE 3 of 5

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
_____ 3	COMPLETE THE FOLLOWING ITEMS ON ATTACHMENT 1, NRC EVENT NOTIFICATION WORKSHEET: <ul style="list-style-type: none"> • Items 1 - 9 • Items 11 - 20 	
_____ 4	ASK SEM TO SIGN ATTACHMENT 1 AT TOP OF PAGE 1 PRIOR TO TRANSMITTAL (indicating review and approval)	
	NOTE: Communications with the NRC Operations Center are recorded by the NRC and by North Anna.	
_____ 5	USE NRC ENS PHONE TO NOTIFY NRC	Use commercial phone: <ul style="list-style-type: none"> • 1-301-816-5100 • 1-301-951-0550 • 1-301-415-0550
	NOTE: The NRC Headquarters Operations Officer may stop you during transmittal of Attachment 1 in order to add other NRC representatives to the call. Data transmittal should continue when you are advised to resume communications.	
_____ 6	USE ATTACHMENT 1 TO NOTIFY NRC HEADQUARTERS OPERATIONS OFFICER	

NUMBER EPIP-2.02	PROCEDURE TITLE NOTIFICATION OF NRC	REVISION 15
		PAGE 4 of 5

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

- NOTE:
- VPAP-2802, NOTIFICATIONS AND REPORTS, contains detailed NRC reporting requirements established by regulations, agreements, commitments and management directives.
 - ERDS data points are listed in PCS Group Displays labeled ERDS - PLANT DATA and ERDS RAD / MET.
 - The NRC Emergency Communicator should relocate to the TSC with the SEM, or as soon as possible thereafter. It may be necessary to wait for arrival of a TSC NRC Communicator if a continuous line has been established and must be maintained.

____ 7 CHECK IF CONTINUOUS OPEN LINE TO BE MAINTAINED

IF continuous communications NOT required, THEN do the following:

- Ask NRC Operations Officer when follow-up call is required.
- Record time follow-up call is required on Attachment 2, NRC Emergency Communicator Log.
- WHEN follow-up call is required, THEN GO TO Step 8.

____ 8 CONTINUE NRC COMMUNICATIONS:

- Get information needed to answer questions (e.g., PCS, Station Emergency Manager)
- Update NRC as conditions change
- Use Attachment 2, NRC Emergency Communicator Log, to note items of record (e.g., excerpts from questions, associated responses, changes of NRC and North Anna communicators)

____ 9 CHECK EMERGENCY - TERMINATED

RETURN TO Step 8.

NUMBER EPIP-2.02	PROCEDURE TITLE NOTIFICATION OF NRC	REVISION 15 <hr/> PAGE 5 of 5
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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

___ 10 NOTIFY NRC OF EVENT TERMINATION .

___ 11 CHECK IF ERDS WAS ACTIVATED GO TO Step 13.

___ 12 TERMINATE ERDS DATA LINK USING
 ATTACHMENT 3, ERDS OPERATION
 (Steps 9 through 13)

___ 13 TERMINATE PROCEDURE:

- | | |
|---|--|
| <ul style="list-style-type: none"> • Give completed EPIP-2.02, forms and other applicable records to the Emergency Procedures Coordinator • Completed by: _____ Date: _____ Time: _____ | <ul style="list-style-type: none"> • Give to STA. |
|---|--|

-END-

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	NRC EVENT NOTIFICATION WORKSHEET	15
ATTACHMENT		PAGE
1		1 of 11

APPROVAL (SEM): _____; Date/time: ____/____/____.

1. This is North Anna Power Station. This message is being recorded. I have information to transmit. Please inform me when you are ready to copy (proceed when informed):
The current time is _____. The date is ____/____/_____.

2. This event affects (Unit 1, Unit 2, both units, ISFSI).

3. My name is _____.

4. Please provide your name for our records: _____.

5. My callback number is: (540) _____.

6. A(n)

<input type="checkbox"/> Notification of Unusual Event
<input type="checkbox"/> Alert
<input type="checkbox"/> Site Area Emergency
<input type="checkbox"/> General Emergency

 was declared at _____ on ____/____/____.
(hours) (date)

7. Unit 1 is at _____% power, in Mode _____.
Unit 1 will be: held stable,
 cooled down and depressurized,
 stabilized before further actions.

Unit 2 is at _____% power, in Mode _____.
Unit 2 will be: held stable,
 cooled down and depressurized,
 stabilized before further actions.

8. Critical Safety Function Status Tree indications are:
 All green paths;
 As follows (list color if other than green and be prepared to discuss FRP status, e.g., implemented or not implemented):

PATH	PATH COLOR	FRP STATUS
Subcriticality (F-1)		
Core Cooling (F-2)		
Heat Sink (F-3)		
Integrity (F-4)		
Containment (F-5)		
Inventory (F-6)		

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	NRC EVENT NOTIFICATION WORKSHEET	15
ATTACHMENT 1		PAGE 2 of 11

NOTE: A description of the EAL Condition/Applicability and Indication should be provided (refer to EPIP-1.01, Attachment 1). Additional detail should be provided as necessary to describe the event.

9. EVENT DESCRIPTION: _____

NOTE: The NRC Headquarters Operations Officer may connect additional NRC representatives to the call. Items may have to be repeated as NRC representatives are bridged on.

10. Should I continue with this notification or wait for additional NRC representatives to be bridged to the call? (Either proceed or wait, as directed by NRC, then do one of the following):

- IF emergency classification - Notification of Unusual Event, THEN read Items 11 through 21

OR

IF emergency classification - Alert or higher, THEN do the following:

- a. Read Items 11 through 20 (the NRC representative may suspend/defer transmittal of this information and ask for other data)
- b. IF additional data is requested, THEN use the Reference Menu on the next page as a guideline to answer questions:
 - Refer to appropriate item and give data that is specific to the event. The NRC may ask questions not addressed by these items, in which case it will be necessary to get data from other available means (e.g., PCS, Station Emergency Manager).

NUMBER	ATTACHMENT TITLE NRC EVENT NOTIFICATION WORKSHEET	REVISION
EPIP-2.02		15
ATTACHMENT		PAGE
1		3 of 11

REFERENCE MENU

Power/Mode prior to event	Item 11
Description of affected systems, initiating signals, effect of event on plant, etc.	Item 12
NRC Resident Inspector notification	Item 13
Government agency notification	Items 14-15
Press release	Item 16
Mode of Operation until correction	Item 17
Time of restart	Item 18
Radiological release, exposures, contaminations, release rates, monitor readings	Item 19
RCS leakage	Item 20
Steam Generator Tube Leakage	Item 20
NRC Form 361 Close-out	Item 21
System Failures	Item 22
Dose projections	Item 23
Planned release	Item 24
Potential escalation path(s)	Item 25
Method of core heat removal	Item 26
Unit 1 major equipment status: ECCS, Diesels, RCS Integrity, Fuel Integrity, Containment Integrity, Balance of Plant, Offsite Electrical Supply	Item 27
Unit 2 major equipment status: ECCS, Diesels, RCS Integrity, Fuel Integrity, Containment Integrity, Balance of Plant, Offsite Electrical Supply	Item 28
Miscellaneous: Emergency Response Organization augmentation, Offsite Assistance, Accountability, Protective Action Recommendations, Pertinent Data (as specified by SEM)	Items 29-33

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	NRC EVENT NOTIFICATION WORKSHEET	15
ATTACHMENT 1		PAGE 4 of 11

11. Power level and mode prior to the event:

[] Unit 1: _____%, Mode _____.

[] Unit 2: _____%, Mode _____.

12. Describe systems affected, actuation and initiating signals, causes, effect of event on plant, corrective actions taken or planned, etc. Explain any systems that did not function as required. Include anything "unusual" or that is not understood as of the time of this report:

13. The NRC Resident Inspector ([] has been, [] has not been, [] will be) notified.

14. State and Local agencies ([] have been, [] have not been) notified.

15. Other government agencies ([] have been, [] have not been, [] will be) notified. List agencies notified, if any: _____

_____.

16. We ([] plan, [] do not plan, [] have not yet determined whether) to make a press release.

17. The unit Mode of Operation until correction will be: _____.

18. The estimated time of restart is _____ (N/A if not applicable).

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	NRC EVENT NOTIFICATION WORKSHEET	15
ATTACHMENT		PAGE
1		5 of 11

NOTE: Item 19 need only be completed for a radiological release.

19. Radiological release data is as follows:

- a. The release (is, was): (liquid, gaseous).
- b. The release (is, was): (planned, unplanned).
- c. The release (is, was): (ongoing, terminated).
- d. The release (is, was): (monitored, unmonitored).
- e. Tech Spec limits (were, were not) exceeded. List Tech. Spec. limit(s) exceeded: _____.
- f. Onsite areas (have, have not) been evacuated. List areas evacuated, if any: _____.
- g. Personnel (have, have not) been exposed or contaminated. Describe exposure or contamination event, if any: _____.
- h. Offsite Protective Action Recommendations (have been made, have not been made).
- i. Release rate information (is not available, is as follows):

	Release Rate, Ci/sec	% Tech. Spec. Limit
Noble Gas		
Iodine		
Particulate		
Liquid (excluding tritium) and dissolved noble gases)		
Liquid tritium		
TOTAL ACTIVITY		

(Item 19 continued on next page)

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	NRC EVENT NOTIFICATION WORKSHEET	15
ATTACHMENT 1		PAGE 7 of 11

NOTE: Item 20 need only be completed for Reactor Coolant or Steam Generator Tube leaks.

20. (Reactor Coolant System, Steam Generator Tube leak) data is as follows:

- a. The location of the leak (is, was):_____.
- b. The leak rate (is, was) _____ (specify units, e.g., gpm/gpd).
- c. The leak volume (is, was):_____.
- d. Tech Spec limits (were, were not) exceeded. (If applicable, the Tech. Spec. limit exceeded was:_____.
- e. This problem was a (sudden, long-term) development.
- f. The leak start date was:___/___/_____. The start time was:_____.
- g. Primary Coolant activity (Specify units of activity):_____.
- h. Secondary Coolant activity (Specify units of activity):_____.
- i. The following safety-related equipment is NOT operational:_____.

- NOTE:
- The NRC may direct that a supplemental notification be made (e.g., after a specified period of time, or when the event is terminated). Attachment 2 should be used to record subsequent communications with the NRC.
 - Item 21 is not applicable and may be marked "N/A" if a continuous, open line is to be maintained.

21. This completes the report at (time) _____ on (date) ___ / ___ / _____.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	NRC EVENT NOTIFICATION WORKSHEET	15
ATTACHMENT		PAGE
1		8 of 11

22. System failures are as follows (list failures and be prepared to discuss compensatory/corrective action status):

23. Dose projections are: _____

24. A planned release:
 is in progress is required
 may be required is NOT required
If in progress or required, then give detail (e.g., when required, pathway):

25. Evident escalation path (potential for escalation) is:
 none;
 (describe plant parameters being assessed against emergency classification criteria, e.g., parameters that may pose a challenge to EAL thresholds): _____

26. Method of core heat removal: _____

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	NRC EVENT NOTIFICATION WORKSHEET	15
ATTACHMENT		PAGE
1		9 of 11

27. UNIT 1 - MAJOR EQUIPMENT STATUS:

a. EMERGENCY CORE COOLING SYSTEM:

Train A:

High Head SI: Operating Available Failed
 Low Head SI: Operating Available Failed

Train B:

High Head SI: Operating Available Failed
 Low Head SI: Operating Available Failed

b. EMERGENCY DIESELS:

1H - Operating Available Failed
 # 1J - Operating Available Failed

c. RCS Integrity:

Is intact.
 LOCA (is, is not) in progress.
 Size is (estimated at _____ gpm, unknown).
 SGTR (is, is not) in progress.
 Size is (estimated at _____ gpm, unknown).

d. Fuel Integrity:

There are no fuel failure indications.
 Fuel failure is indicated based on:
 RCS sample
 Effluent radiation monitor readings
 Letdown radiation monitor readings
 Containment radiation monitor readings

e. Containment Integrity:

There is no containment failure indicated.
 Containment failure or degradation is indicated by: _____

f. Secondary systems (MS/FW/Turbine):

Intact
 Failures: _____

g. Offsite electrical supply:

Available
 Not available
 Degraded (i.e., partial losses): _____

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	NRC EVENT NOTIFICATION WORKSHEET	15
ATTACHMENT 1		PAGE 10 of 11

28. UNIT 2 - MAJOR EQUIPMENT STATUS:

a. EMERGENCY CORE COOLING SYSTEM:

Train A:

High Head SI: Operating Available Failed

Low Head SI: Operating Available Failed

Train B:

High Head SI: Operating Available Failed

Low Head SI: Operating Available Failed

b. EMERGENCY DIESELS:

2H - Operating Available Failed

2J - Operating Available Failed

c. RCS Integrity:

Is intact.

LOCA (is, is not) in progress.

Size is (estimated at _____ gpm, unknown).

SGTR (is, is not) in progress.

Size is (estimated at _____ gpm, unknown).

d. Fuel Integrity:

There are no fuel failure indications.

Fuel failure is indicated based on:

RCS sample

Effluent radiation monitor readings

Letdown radiation monitor readings

Containment radiation monitor readings

e. Containment Integrity:

There is no containment failure indicated.

Containment failure or degradation is indicated by: _____

f. Secondary systems (MS/FW/Turbine):

Intact

Failures: _____

g. Offsite electrical supply:

Available

Not available

Degraded (i.e., partial losses): _____

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	NRC EVENT NOTIFICATION WORKSHEET	15
ATTACHMENT 1		PAGE 11 of 11

NOTE: The TSC is usually activated in about 30 minutes during normal work hours, and in about 60 minutes during off-hours.

29. The Emergency Response Organization (will be, has been, will not be) called out.
 TSC activation is projected at approximately (give time) _____.
30. Offsite assistance (is not required, has been requested, has arrived onsite). Specify assistance, if requested: _____

31. Accountability is (not required, in progress, completed, deferred). Report results if known: _____

NOTE: Protective Action Recommendations may be obtained from the State and Local Emergency Communicator.

32. A Protective Action Recommendation (PAR):
 is NOT required.
 (is being, has been) made to the State of Virginia and is as follows:

Standard: Evacuate 360° from 0 miles to 5 miles.

Expanded:

- Evacuate 360° from 0 miles to 5 miles.
- Evacuate 360° from 5 miles to _____ miles.
- Evacuate sectors _____ from _____ miles to _____ miles.
- Shelter 360° from _____ miles to _____ miles.
- Shelter sectors _____ from _____ miles to _____ miles.
- Shelter unaffected sectors from _____ miles to _____ miles.

33. Other data (get from SEM): _____

NUMBER	ATTACHMENT TITLE NRC EMERGENCY COMMUNICATOR LOG	REVISION
EPIP-2.02		15
ATTACHMENT		PAGE
2		1 of 1

Use this log to note information communicated to and from the NRC (e.g., notes about NRC questions and directions, responses to NRC questions, North Anna NRC ENS Communicator and NRC Operations Officer relief). Verbatim transcription of communications is not necessary.

TIME	NOTES

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	ERDS OPERATION	15
ATTACHMENT		PAGE
3		1 of 6

- 1. Assure connection to desired unit's PCS on any unit-specific Control Room PCS workstation or TSC NRC Communicator PCS workstation.
- 2. Select "ERDS" option from Main drop-down menu on command line.
- 3. WHEN ERDS User Interface Display appears, THEN check "STATUS" is:

MODEM	DISCONNECTED
ERDS COMPUTER	TERMINATED
COMMUNICATION TASK	INACTIVE

IF "STATUS" is different from expected, THEN refer to descriptions of LOG MESSAGES and required actions at the end of this attachment.
- 4. Select "ACTIVATE" selectable area or function key F1. (The "STATUS" of the MODEM, ERDS COMPUTER and COMMUNICATIONS TASK will change during ERDS connection.)
- 5. Wait until "STATUS" appears as shown below:

MODEM	CONNECT
ERDS COMPUTER	ACCEPTED
COMMUNICATION TASK	TRANSMITTING

IF after 2-3 minutes "STATUS" is different from expected, THEN refer to descriptions of LOG MESSAGES and required actions at the end of this attachment.
- 6. IF transmission of data for both units desired, THEN complete Steps 1 through 5 for the other unit AND continue with instructions in this Attachment.
- 7. Record when transmission link(s) established:
By: _____
Date: _____
Time: _____
- 8. Notify SEM that Emergency Response Data System link to NRC is active.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	ERDS OPERATION	15
ATTACHMENT		PAGE
3		2 of 6

— 9. WHEN directed by NRC or SEM to terminate ERDS transmission, THEN continue this instruction.

— 10. Select "TERMINATE" selectable area or function key F2. (The "STATUS" of the MODEM, ERDS COMPUTER and COMMUNICATIONS TASK will change during ERDS termination.)

— 11. Wait until "STATUS" appears as shown below:

MODEM	DISCONNECTED
ERDS COMPUTER	TERMINATED
COMMUNICATION TASK	INACTIVE

IF after 2-3 minutes "STATUS" is different from expected, THEN refer to descriptions of LOG MESSAGES and required actions at the end of this attachment.

— 12. IF data transmitted from both units, THEN complete Steps 10 through 11 for the other unit AND continue with instructions in this Attachment.

— 13. Record termination of ERDS data link:

By: _____
 Date: _____
 Time: _____

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	ERDS OPERATION	15
ATTACHMENT		PAGE
3		3 of 6

NOTE: The following sections provide alphabetical listings of:

- MODEM (connection) STATUS MESSAGES
- ERDS COMPUTER (program) STATUS MESSAGES
- COMMUNICATION TASK STATUS MESSAGES

MODEM STATUS MESSAGES

Message: ANSWER
Description: This message indicates the NRC modem answered.
Action: None.

Message: BUSY
Description: This message indicates the NRC modem did not answer. The ERDS software will retry dialing the busy modem. When the defined number of retries is reached, the process will terminate automatically.
Action: The user may select "TERMINATE" selectable area or function key F2 to terminate the communication task before the busy retry count is reached. The problem is with the NRC modem. Contact the NRC.

Message: CONNECT
Description: This message indicates the ERDS modem and the NRC modem answered each other, connected and are ready for ERDS information packets to be transferred.
Action: None.

Message: DIALING
Description: This message indicates the ERDS software has sent a dial command to the ERDS modem and the ERDS modem is dialing the NRC modem.
Action: None.

Message: DISCONNECTED
Description: This message is self-explanatory. This is the expected modem status before activating ERDS and after terminating ERDS.
Action: None.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	ERDS OPERATION	15
ATTACHMENT 3		PAGE 4 of 6

MODEM STATUS MESSAGES (continued)

Message: ERROR
Description: This message is self-explanatory.
Action: Select "TERMINATE" selectable area or function key F2 and make a second attempt to activate ERDS. IF problem recurs, THEN request OSC dispatch Instrument Technician to investigate.

Message: NO CARRIER
Description: This message may indicate the NRC phone number in the program file is missing or the file has been corrupted.
Action: Request Telecommunications support from LEOF or IT HelpLine.

Message: NO DIAL TONE
Description: This message indicates the ERDS modem did not detect a dial tone.
Action: The problem is with the telephone system. Request Telecommunications support from LEOF or IT HelpLine.

Message: OK
Description: This message indicates the ERDS software has sent a dial command to the ERDS modem and the ERDS modem responded with an OK.
Action: None.

Message: RINGING
Description: This message indicates the NRC modem is ringing.
Action: If this modem status persists, there may be a problem is with NRC computer. Contact the NRC.

Message: TIMED OUT
Description: This message indicates ERDS modem has timed out.
Action: The user may select "TERMINATE" selectable area or function key F2 to terminate the communication task before the busy retry count is reached. Make a second attempt to activate ERDS. IF problem recurs, THEN request OSC dispatch Instrument Technician to investigate.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	ERDS OPERATION	15
ATTACHMENT		PAGE
3		5 of 6

ERDS COMPUTER STATUS MESSAGES

Message: ACCEPTED
Description: This message indicates the NRC computer accepted the link request from the ERDS software.
Action: None.

Message: DENIED
Description: This message indicates the NRC computer denied the link request from the ERDS software.
Action: Contact the NRC.

Message: TERMINATED
Description: This message is self-explanatory. This is the expected modem status before activating ERDS and after terminating ERDS.
Action: None.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-2.02	ERDS OPERATION	15
ATTACHMENT		PAGE
3		6 of 6

COMMUNICATIONS TASK STATUS MESSAGES

Message: ACTIVE
Description: This message indicates the user has activated the ERDS software.
Action: None.

Message: INACTIVE
Description: This message is self-explanatory. This is the expected communications task status before activating ERDS and after terminating ERDS.
Action: None.

Message: LINK REQUESTED
Description: This message indicates the ERDS modem and the NRC modem have connected and synchronized, and the ERDS modem has sent a link request to the NRC modem.
Action: None.

Message: RETRY N (where N is the retry count)
Description: The timeout period of 30 seconds has elapsed. This message indicates the ERDS modem has malfunctioned or has been powered off such that the modem can not receive commands.
Action: Request OSC dispatch Instrument Technician to investigate.

Message: TIMED OUT
Description: This message indicates the retry count has been exceeded because of a problem with the ERDS modem. The ERDS communication task will terminate after it has timed out.
Action: Request OSC dispatch Instrument Technician to investigate.

Message: TRANSMITTING
Description: This message indicates the NRC computer sent an initiate command to the ERDS computer and data transmission is occurring. This message remains until ERDS data transmission is terminated.
Action: None.

VIRGINIA POWER
NORTH ANNA POWER STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURE

NUMBER EPIP-3.02	PROCEDURE TITLE ACTIVATION OF TECHNICAL SUPPORT CENTER (With 14 Attachments)	REVISION 20
		PAGE 1 of 4

PURPOSE

1. To provide guidance to personnel responsible for TSC Activation.
2. To provide guidance to TSC members.

LEVEL 2 DISTRIBUTION
This Document Should Be Verified
And Annotated To A Controlled Source
As Required to Perform Work

ENTRY CONDITIONS

Any one of the following:

1. Declaration of Alert, Site Area Emergency or General Emergency.
2. Entry from another EPIP.
3. Direction of the Station Emergency Manager.

Approvals on File

Effective Date 8/28/02

NUMBER EPIP-3.02	PROCEDURE TITLE ACTIVATION OF TECHNICAL SUPPORT CENTER	REVISION 20
		PAGE 2 of 4



NOTE: The first person to report to the TSC should implement this procedure and then give it to the Emergency Administrative Director upon his/her arrival.

____ 1 INITIATE PROCEDURE:

- By: _____
- Date: _____
- Time: _____

____ 2 CHECK ACCOUNTABILITY CARD READER - IN SERVICE

IF accountability card reader NOT in-service, THEN do the following:

- a) Initiate Attachment 1, Entry/Exit Log.
- b) WHEN Emergency Assembly Area Leaders are directed to report results of accountability, THEN use Attachment 1 to provide badge numbers of personnel in TSC.

____ 3 HAVE PERSONNEL MEETING EITHER OF THE FOLLOWING CRITERIA RECORD INFORMATION ON ATTACHMENT 1, ENTRY/EXIT LOG

- Exiting the TSC
- OR
- Entering TSC after accountability completed

____ 4 SET UP TSC USING ATTACHMENT 2

NUMBER EPIP-3.02	PROCEDURE TITLE ACTIVATION OF TECHNICAL SUPPORT CENTER	REVISION 20
		PAGE 3 of 4



- NOTE:
- Some of the directors may be in the Control Room with the SEM.
 - Minimum staff positions shown on the facility staffing board must be filled prior to TSC activation.

- | | |
|--|---|
| <p>_____ 5 DETERMINE STATUS OF MINIMUM REQUIRED TSC STAFF POSITIONS</p> | <p><u>IF</u> any positions vacant, <u>THEN</u> do the following:</p> <p>a) Get EPNL to identify designees for vacant position(s).</p> <p>b) Compare list of persons notified by automated notification (if available) to determine if any designees for vacant positions are enroute.</p> <p>c) Attempt to contact personnel using contact numbers in EPNL.</p> |
| <p>_____ 6 NOTIFY STATION EMERGENCY MANAGER OF TSC MINIMUM STAFFING AND EQUIPMENT STATUS SO THAT TSC MAY BE DECLARED ACTIVATED</p> | |
| <p>_____ 7 DETERMINE STATUS OF TSC FULL STAFF POSITIONS</p> | <p><u>IF</u> any positions vacant, <u>THEN</u> do the following:</p> <p>a) Get EPNL to identify designees for vacant position(s).</p> <p>b) Compare list of persons notified by automated notification (if available) to determine if any designees for vacant positions are enroute.</p> <p>c) Attempt to contact personnel using contact numbers in EPNL.</p> |

NUMBER EPIP-3.02	PROCEDURE TITLE ACTIVATION OF TECHNICAL SUPPORT CENTER	REVISION 20
		PAGE 4 of 4

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
------	--------------------------	-----------------------

- 8 WHEN STATION EMERGENCY MANAGER DIRECTS TSC DEACTIVATION, THEN SECURE TSC:
- a) Restore TSC to original status using Attachment 2, TSC Set-Up and Take-Down
 - b) Affix completed Attachments to this EPIP:
 - Attachment 1, Entry/Exit Log
 - Attachment 3, page 3, Resource Request Log
 - Attachment 12, Shift Rotation Schedule
 - Attachment 13, Data Sheet for Injured Person
 - Attachment 14, Plant Status

Retain this procedure until TSC deactivated.

- 9 TERMINATE EPIP-3.02:
- Give completed EPIP-3.02, forms and other applicable records to the Emergency Procedures Coordinator
 - Completed by: _____
 - Date: _____
 - Time: _____

-END-

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	ENTRY/EXIT LOG	20
ATTACHMENT		PAGE
1		1 of 1

Enter name, badge number, and time of arrival of personnel in the appropriate columns below. As personnel exit the TSC, enter departure time and destination in the far right columns. New line entries should be made for returning personnel. Continue this log on additional pages as required.

<u>NAME</u>	<u>BADGE NO</u>	<u>IN</u> (Use 24-Hour Time)	<u>OUT</u>	<u>DESTINATION</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
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_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Name: _____ Date: _____ Page ____ of ____

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	TSC SET-UP AND TAKE-DOWN	20
ATTACHMENT		PAGE
2		1 of 1

1. SET-UP TSC:

- a) Distribute supplies:
 - Position binders from Emergency Admin. Closet
 - EPIP-3.02 Director Guidelines (Attachments 3 - 10 of this EPIP)
- b) Activate the following equipment:
 - PA System
 - Verify Gai-Tronics audible (adjust volume as necessary)

NOTE: The following items are to be completed as you are able. The EAD is to be informed of those items which have not been accomplished.

- c) Do the following checks and tests:
 - Verify back entrance sealed (blast door CLOSED)
 - Verify photo copier working
 - Check paper level in printer(s), copier(s) and facsimile machine(s)
 - Synchronize the clocks to computer time
 - Test telecopier
 - Test Aperture Card Reader/Printer
 - Verify telephones operable
- d) Report any discrepancies to the EAD

2. TAKE-DOWN (RESTORE) TSC:

- a) Restock procedures
- b) Verify Operations has realigned ventilation system to normal mode
- c) Direct HP to perform PT on emergency kits
- d) Check emergency supplies and restock as required
- e) Arrange for laborers to clean TSC
- f) Clean all Status Boards
- g) Replace break-away lock(s)
- h) Submit work orders on any equipment malfunctions

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	EMERGENCY ADMINISTRATIVE DIRECTOR GUIDELINE	20
ATTACHMENT		PAGE
3		1 of 3

__1. Verify Organization:

- a) Emergency Communicators
- b) Administrative Support Team:
 - Administrative Support Team Leader
 - Safety/Loss Prevention Support (OSC)
 - Clerks
- c) TSC Logkeeper
- d) Security Team:
 - Security Shift Supv. (Team Leader)
 - Security Officers

__2. Assist in logistics of TSC activation and operation.

__3. Provide clerical and records support.

__4. Ensure TSC Logkeeper maintains chronology of key events, including status changes, management decisions in response to event assessment and response, etc.

__5. Ensure TSC accountability is maintained.

__6. Direct Security Team activities:

- Personnel Accountability
- Access control
- LEOF activation
- Liaison with local law enforcement agencies
- Notification of offsite assistance (police, fire and rescue units)

__7. Get information regarding any injury and assure it is forwarded to LEOF and CERC. Use EPIP-3.02, Attachment 13, DATA SHEET FOR INJURED PERSONS.

__8. Coordinate acquisition of equipment, supplies and personnel. Offsite support should be coordinated through the LEOF. Use Resource Request Log (page 3 of this attachment) to track status.

__9. Coordinate waiver or provision for Nuclear Power Station Plant Access Training for offsite agencies called in to assist in emergency response.

__10. IF PCS is NOT operable, THEN make sure EPIP-3.02 Attachment 14, Plant Status, reports are sent to both the LEOF and CERC (e.g., via facsimile). (Get status report form from TSC-LEOF Phonetalker.)

__11. Ensure Safety/Loss Prevention Support advises the Station Emergency Manager on fire protection and first aid matters.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	EMERGENCY ADMINISTRATIVE DIRECTOR GUIDELINE	20
ATTACHMENT		PAGE
3		2 of 3

_12. Ensure the Security Team Leader advises the SEM on Security matters.

_13. Ensure arrangements are made for relief of the following personnel:

- Administrative Support Team
- Security Team
- Fire Team
- First Aid Team
- Emergency Communicators

_14. Coordinate station shift relief:

a) Determine relief requirements for the following:

- 1) Refer to EPIP-3.02, Attachment 12, SHIFT ROTATION SCHEDULE
- 2) Additional support staff requirements from Emergency Directors

b) Identify standby personnel (personnel who are available but not filling positions as primary responders)

c) Develop shift relief schedule:

- Use Emergency Personnel Notification List (EPNL) to identify designated qualified personnel (Numbers following position titles on Attachment 12 correspond with position numbers appearing on EPNL.
- Ask Emergency Directors to help select personnel for assignment
- Verify personnel are available and capable of responding
- Consider alternative personnel resources (Surry personnel with similar assignments or persons who can be provided ad hoc training)
- Consider implementation of a split shift turnover (stagger turnover times by discipline)
- Record assignments on Attachment 12

d) Ask SEM to approve schedule

e) Give instructions to standby personnel who are not presently needed (e.g., send home or remain on standby)

f) Notify relief shifts (Refer to EPNL for contact numbers):

- 1) Consider asking LEOF for assistance in making notifications
- 2) Notify relief personnel of the following:
 - Reporting time
 - Ingress route to the station
 - Reporting location

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	EMERGENCY TECHNICAL DIRECTOR GUIDELINE	20
ATTACHMENT 4		PAGE 1 of 1

- __1. Verify Technical Support Team Organization:

 - Team Leader
 - Operational Advisor
 - Reactor Engineer
 - Mechanical Engineer
 - Electrical Engineer
- __2. Notify Westinghouse (NSSS Vendor).
- __3. Use PCS to assess emergency conditions.
- __4. WHEN approximately 72 hours have elapsed since the initiating event, THEN consider need for downloading PCS historical file to magnetic tape. (The PCS archive memory limit is greater than 4 days.)
- __5. Analyze and develop solutions to problems in the following areas:

 - Engineering
 - Reactor Physics
 - Instrumentation and Control
- __6. Periodically assess need for Chemistry sampling.
- __7. Assist in development of procedures as required.
- __8. Interface with NRC and aid in resolution of questions concerning licensing requirements.
- __9. IF LESS THAN one SAMG Decision Maker and three SAMG Evaluators available, THEN initiate actions to augment the TSC staff with qualified personnel. (Qualified personnel are listed at Positions 475 and 476 on the Emergency Personnel Notification List which is available from the EAD.)
- __10. IF event transitions into SAMG implementation; THEN do the following:

 - Have the SAMG Evaluators continually review the Diagnostic Flow Chart (DFC) and Severe Challenge Status Tree (SCST), and assure results are made available to the SEM and EOD. Consider designating one Evaluator to track DFC and SCST status.
 - Assure the SEM and EOD are advised of SAMG-suggested methods of implementation.
 - Direct the SAMG Evaluators to use the SAMG indicated by the DFC and SCST, as appropriate.
- __11. Assure arrangements are made for relief of Technical Support Team and that the TSC relief shift includes at least one SAMG Decision Maker and three SAMG Evaluators.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	EMERGENCY OPERATIONS DIRECTOR GUIDELINE	20
ATTACHMENT		PAGE
5		1 of 1

- __1. Establish communications with Control Room to obtain operational status and to direct response as required.
- __2. Ensure TSC on emergency ventilation in accordance with 1-OP-21.10, TSC Emergency Ventilation upon a Safety Injection and/or as required by radiological conditions.
- __3. Verify availability of Operations personnel in OSC and request additional personnel as required.
- __4. Use PCS to assess emergency conditions.
- __5. Ensure TSC-Control Room phonetalker in position to maintain communication with the Control Room and update Plant Status boards (as required).
- __6. Evaluate status of unaffected unit.
- __7. Assess events for reportability to outside agencies.
- __8. Provide status change data and recommendations to SEM as required.
- __9. Assist in procedure development as necessary.
- __10. IF event transitions into SAMG implementation, THEN do the following:
 - Assure the SEM is kept informed of strategies being considered by the Control Room.
 - Maintain cognizance of the responsibility for directing Operations personnel in the development of possible methods to implement the SAMG recommended (or being considered) by the SAMG Evaluators.
 - Determine if equipment manipulations being requested by the Control Room should be evaluated by the SAMG Evaluators prior to the activity taking place.
- __11. Ensure arrangements are made for relief of:
 - a) Control Room personnel (including on-shift STA)
 - b) Standby Operations personnel in OSC

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	STATION EMERGENCY MANAGER GUIDELINE	20
ATTACHMENT		PAGE
6		1 of 2

1. Verify emergency response organization (ERO):

- Emergency Operations Director (EOD)
- Emergency Maintenance Director (EMD)
- Emergency Technical Director (ETD)
- Emergency Administrative Director (EAD)
- Radiological Assessment Director (RAD)
- Emergency Procedures Coordinator (EPC)
- Emergency Communicators (3)
- OSC Director (at OSC)

2. WHEN ready to activate TSC, THEN do the following:

- a) Announce facility activation to staff
- b) Identify yourself as SEM
- c) Provide initial status briefing

NOTE: The following responsibilities may not be delegated:

- Classifying the emergency
- Notifying NRC, State and local governments of emergency status
- Recommending protective measures
- Authorizing emergency exposure

3. WHEN LEOF is activated, THEN do the following:

- a) Transfer the following responsibilities to the Recovery Manager:
 - Notifying State and local governments of emergency status
 - Recommending offsite protective measures
 - Performing offsite dose projections
 - Providing radiological status to the NRC (after the NRC asks that the Health Physics Network (HPN) be established over ENS)
- b) Notify TSC staff that above responsibilities transferred to LEOF.

4. Ensure timely notifications are made to offsite authorities.

5. Approve temporary procedures/changes as required. Procedures may be changed at the discretion of the SEM during emergency conditions.

6. Use PCS to assess emergency conditions and response actions.

7. Periodically reference EPIP-1.01, EMERGENCY MANAGER CONTROLLING PROCEDURE, to assess and manage the emergency.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	STATION EMERGENCY MANAGER GUIDELINE	20
ATTACHMENT		PAGE
6		2 of 2

- _8. Ensure suitable arrangements for relief of ERO through emergency directors.
- _9. Keep station personnel informed about event status and their expected actions using Gai-Tronics or by other available means of communication.
- _10. IF TSC must be evacuated, THEN designate TSC team members who will report to the alternate TSC in the Control Room, and those members who will report to the Alternate OSC.
- _11. IF event transitions into SAMG implementation, THEN take responsibility for authorizing the SAMG strategy to be implemented based on recommendations from the EOD and/or ETD.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	EMERGENCY PROCEDURES COORDINATOR GUIDELINE	20
ATTACHMENT		PAGE
7		1 of 1

- _1. Assist SEM in review and adherence to controlling procedures.
- _2. Monitor Emergency Action Level entry conditions.
- _3. Assure appropriate procedures are initiated as required.
- _4. Assure SEM periodically updates TSC staff and station personnel on the following:
 - Emergency status
 - Mitigation goals and techniques
 - Direction of overall response
- _5. Assure Emergency Communicators make periodic updates to offsite authorities as required.
- _6. Track and hold completed procedures and logs until TSC deactivation.
- _7. Assure procedures are properly completed and made available to Nuclear Emergency Preparedness for preparation of the Summary Report to the State, and ensure subsequent review by the SNSOC. The report for a Notification of Unusual Event is due to the State 72 hours after the event is declared. All higher classifications require a report within 8 hours after termination.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	RADIOLOGICAL ASSESSMENT DIRECTOR GUIDELINE	20
ATTACHMENT		PAGE
8		1 of 2

__1. Verify Organization:

- Dose Assessment Team
- Offsite Monitoring Team
- Evacuation Monitoring Team
- Inplant Monitoring Team
- Onsite Monitoring Team
- Sample Analysis Team
- Personnel Monitoring and Decontamination Team
- Chemistry Team

__2. Direct HP response using EPIP-4.01, RADIOLOGICAL ASSESSMENT DIRECTOR CONTROLLING PROCEDURE.

__3. Use PCS to assess emergency conditions.

__4. Direct activities of the following emergency response personnel:

- Radiation Protection Supervisor
- Dose Assessment Team
- Offsite and Evacuation Monitoring Teams
- Chemistry Team

__5. Assure communicator is assigned to Health Physics Network (HPN) phone in Dose Assessment Office. (The Health Physics Network (HPN) is established after the NRC announces it is warranted over the ENS.)

__6. Give results of Chemistry sampling to ETD for evaluation.

__7. WHEN LEOF activated, THEN do the following:

- Direct Dose Assessment Team Leader to transfer Offsite Dose Assessment to the LEOF Radiological Assessment Coordinator
- Transfer direction of Offsite and Evacuation Monitoring Teams to Radiological Assessment Coordinator
- Ensure LEOF assumes responsibility for HPN communications
- Confer with Radiological Assessment Coordinator for consensus on accident type (to yield consistency in dose assessments).

__8. Determine release status and evaluate offsite dose assessment data until assumed by LEOF.

__9. Give SEM periodic updates on the following:

- Radiological status
- Emergency exposure

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	RADIOLOGICAL ASSESSMENT DIRECTOR GUIDELINE	20
ATTACHMENT 8		PAGE 2 of 2

- __10. Make recommendation for onsite and offsite protective actions to SEM when appropriate.
- __11. Assure HP coverage or RWP available for Damage Control Activities.
- __12. Assist in development of procedures as necessary.
- __13. Assure relief available for HP and Chemistry emergency response personnel.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	EMERGENCY MAINTENANCE DIRECTOR GUIDELINE	20
ATTACHMENT		PAGE
9		1 of 1

__1. Verify organization:

a) Maintenance Support Team:

- Team Leader
- Mechanical Department Representative
- Electrical Department Representative
- Planning Representative
- I&C Representative

b) OSC personnel

__2. Direct activities of Maintenance Support Team and Damage Control Team:

- Monitor task status and location of teams
- Continually reassess priority assignments with SEM

__3. Direct damage control activities using EPIP-5.08, DAMAGE CONTROL GUIDELINE.

__4. Periodically update SEM on damage control activities.

__5. Assist in procedure development as necessary

__6. Ensure arrangements are made for relief of:

- Maintenance Support Team
- OSC personnel

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	GUIDELINE FOR EMERGENCY COMMUNICATORS	20
ATTACHMENT		PAGE
10		1 of 1

1. NRC Communicator

Assume NRC notification responsibility from onshift NRC Communicator. Continue notifications IAW EPIP-2.02, NOTIFICATION OF NRC. Use the PCS to obtain plant parameter data.

NOTE: Follow-up reports of emergency conditions should be provided to state and local governments approximately every 60 minutes or when there are changes in emergency conditions, unless otherwise agreed upon by the State.

A termination notification must always be transmitted following close-out of the event.

2. State and Local Communicator/LEOF Phonetalker

- Assume State and local notification responsibility from onshift State and Local Communicator. Continue notifications IAW EPIP-2.01, NOTIFICATION OF STATE AND LOCAL GOVERNMENTS, until the LEOF/CEOF assumes this function.
- IF either of the following emergency messages transmitted from TSC:
EPIP-2.01 Attachment 2, Notification of State and Local Governments
EPIP-2.01 Attachment 3, Report of Radiological Conditions to the State
THEN ask Administrative Services support to telecopy message(s) to LEOF and CERC (or CERC/CEOF only if CEOF activated).
- Assure Plant Status forms (EPIP-3.02 Attachment 14, Plant Status) are telecopied to LEOF and CERC (or CERC/CEOF only if CEOF activated) if PCS is inoperable or if directed by SEM.

Attachment 14 may be filled-out in any of the following ways:

- Recorded in Control Room and sent to TSC (e.g., via facsimile).
- Recorded in TSC by the Plant Status Communicator/Control Room Phonetalker.
- Copied from the Plant Status Boards maintained by the Plant Status Communicator/Control Room Phonetalker.

3. Plant Status Communicator/Control Room Phonetalker

Assure Plant Status Boards are maintained, if required.

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	NOT USED	20
ATTACHMENT 11		PAGE 1 of 1

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NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	SHIFT ROTATION SCHEDULE	20
ATTACHMENT		PAGE
12		1 of 1

NOTE: The TSC shift relief complement is normally the full staff organization (positions listed below). The Station Emergency Manager has the authority to modify this organization.

EMERGENCY RESPONSE POSITION	FIRST SHIFT	SECOND SHIFT
	NAME	NAME
Station Emergency Manager (401)		
Emergency Procedures Coordinator (437)		
Emergency Operations Director (401)		
NRC ENS Emergency Communicator (405)		
TSC-to-LEOF Communicator (406)		
Plant Status Communicator (From Operations)		
Emergency Technical Director (402)		
Technical Support Team Leader (453)		
Electrical Engineer (409)		
Mechanical Engineer (408)		
Reactor Engineer (407)		
Operational Advisor (467)		
Emergency Maintenance Director (403)		
Maintenance Support Team Leader (454)		
Mechanical Department Representative (455)		
Electrical Department Representative (458)		
Planning Representative (456)		
I & C Representative (459)		
Radiological Assessment Director (404)		
Dose Assessment Team Leader (412)		
Dose Assessment Team Member (411 Or 438)		
Emergency Administrative Director (413)		
Administrative Support Team Leader (460)		
Administrative Support Team Clerk (463)		
Administrative Support Team Clerk (463)		
Administrative Support Team Clerk (463)		
Technical Support Center Logkeeper (461)		

NUMBER EPIP-3.02 ATTACHMENT 13	ATTACHMENT TITLE DATA SHEET FOR INJURED PERSONS	REVISION 20 PAGE 1 of 1
---	---	--

NAME OF INJURED PERSON: _____
EMPLOYER: _____
DATE/TIME OF INJURY: _____
DESCRIPTION OF EVENT: _____ _____
SUMMARY OF INJURIES: _____ _____
EXPOSURE/CONTAMINATION INFORMATION: _____ _____
TRANSPORT INFORMATION: a. Transported to: _____ b. Mode of transport: _____ c. Time departed station: _____ d. Expected time of arrival at medical facility: _____
REMARKS: _____ _____ _____ _____ _____

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-3.02	PLANT STATUS	20
ATTACHMENT		PAGE
14		1 of 1

UNIT _____ MWE _____ REACTOR POWER _____% TIME _____%

PRIMARY SYSTEM
 REACTOR COOLANT SYSTEM (T=TEMPERATURE) - HOTTEST TH _____°F; HOTTEST TC _____°F
 LOOP "A" DELTA T _____%; LOOP "B" DELTA T _____%; LOOP "C" DELTA T _____%
 PRESSURE _____PSIG; PRESSURIZER LEVEL _____%

REACTOR COOLANT PUMP
 A: _____ A R OOC; B: _____ A R OOC; C: _____ A R OOC

CORE PARAMETERS
 CORE EXIT THERMOCOUPLE _____°F (Average of highest 5)
 MARGIN TO SATURATION: Ch A - _____°F; Ch B - _____°F
 SOURCE RANGE COUNTS: N 31 - _____; N 32 - _____
 INTERMEDIATE RANGE AMPS: N 35 - _____; N 36 - _____
 RVLIS: DYNAMIC - _____%; FULL - _____%

CONTAINMENT
 TEMPERATURE _____°F; PRESSURE _____PSIA; SUMP LEVEL _____FT
 CONTAINMENT ISOLATION PHASE: A, B HYDROGEN _____%

SECONDARY SYSTEM
 STEAM GENERATOR LEVEL
 WIDE RANGE: A _____%; B _____%; C _____%
 (0 - 100%) (0 - 100%) (0 - 100%)
 NARROW RANGE: A _____%; B _____%; C _____%
 (NR 0 = 75%) (0 - 100%) (0 - 100%) (0 - 100%)

AUXILIARY FEEDWATER: AUXILIARY FEEDWATER FLOW _____GPM; CN-TK-1/2 LEVEL _____%
 3A: _____ A R OOC; 3B: _____ A R OOC; FW-P-2: _____ A R OOC

ENGINEERED SAFEGUARDS: RWST _____%; SI FLOW _____GPM
 HHSI A: _____ A R OOC; B: _____ A R OOC; C: _____ A R OOC; OSRS A: _____ A R OOC; B: _____ A R OOC
 LHSI A: _____ A R OOC; B: _____ A R OOC; ISRS A: _____ A R OOC; B: _____ A R OOC
 QS A: _____ A R OOC; B: _____ A R OOC; RS-P-3A: _____ A R OOC; B: _____ A R OOC
 RS-TK-1: _____%

ELECTRICAL DISTRIBUTION
 EMERGENCY BUS (SUPPLY)
 H: RSS, DIESEL, DEAD, BACKFEED J: RSS, DIESEL, DEAD, BACKFEED
 EMERGENCY DIESEL GENERATOR (EDG)
 H: OPERATING, AVAILABLE, OOC J: OPERATING, AVAILABLE, OOC

RESERVE STATION SERVICE
 A: HOT/DEAD B: HOT/DEAD C: HOT/DEAD

RADIATION MONITORS
 PROCESS VENT: _____; VENT A: _____; VENT B: _____
 MAIN STEAM A: _____; B: _____; C: _____
 OTHER (Specify): _____
 OTHER (Specify): _____

REMARKS: _____

PREPARER: _____; TIME: _____ (24-hour); DATE: _____

VIRGINIA POWER
NORTH ANNA POWER STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURE

NUMBER EPIP-4.10	PROCEDURE TITLE DETERMINATION OF X/Q (With 6 Attachments)	REVISION 11
		PAGE 1 of 6

PURPOSE

To provide instructions for collection of meteorological data and determination of the atmospheric diffusion factor (X/Q).

LEVEL 2 DISTRIBUTION
This Document Should Be Verified
And Annotated To A Controlled Source
As Required to Perform Work

ENTRY CONDITIONS

Any one of the following:

1. Activation by EPIP-4.01, RADIOLOGICAL ASSESSMENT DIRECTOR CONTROLLING PROCEDURE.
2. Activation by EPIP-4.03, DOSE ASSESSMENT TEAM CONTROLLING PROCEDURE.
3. Activation by another EPIP.

Approvals on File

Effective Date 8/28/02

NUMBER EPIP-4.10	PROCEDURE TITLE DETERMINATION OF X/Q	REVISION 11
		PAGE 2 of 6



____ 1 INITIATE PROCEDURE:

- By: _____
- Date: _____
- Time: _____

NOTE:

- Meteorological data can be obtained from PCS via the WEATHER Group Display or the ERDS RAD / MET Group Display.
- Meteorological data should be used according to the following order of availability: primary tower lower, back-up tower, then primary tower upper level recorders.

____ 2 CHECK METEOROLOGICAL DATA AVAILABLE FROM PCS:

IF PCS NOT available, THEN GO TO Step 5.

- Wind Speed: _____
- Delta T: _____
- Sigma Theta (if delta T not available): _____

____ 3 DETERMINE STABILITY CLASS

AND

RECORD RESULT: _____

<u>DELTA T (°F)</u>	<u>SIGMA THETA (°)</u>	<u>STABILITY CLASS</u>
≤ -1.31	≥ 22.5	A
-1.30 to -1.18	22.4 to 17.5	B
-1.17 to -1.04	17.4 to 12.5	C
-1.03 to -0.35	12.4 to 7.5	D
-0.34 to +1.04	7.4 to 3.8	E
+1.05 to +2.77	3.7 to 2.1	F
> +2.77	< 2.1	G

NUMBER EPIP-4.10	PROCEDURE TITLE DETERMINATION OF X/Q	REVISION 11
		PAGE 3 of 6

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
___ 4	GO TO STEP 6	
___ 5	CHECK METEOROLOGICAL DATA AVAILABLE FROM RAD/RAC/EMERGENCY COMMUNICATOR: <ul style="list-style-type: none"> • Wind Speed: _____ • Stability Class: _____ 	<u>IF</u> meteorological data <u>NOT</u> available from any onsite source, <u>THEN</u> determine regional meteorological data using Attachment 1.
___ 6	DETERMINE CENTERLINE X/Q AT PREDETERMINED DISTANCE: a) Check if X/Q is desired for site boundary or for a distance that is a 0.25 mile increment from the site b) Determine distance (miles) for which X/Q is to be calculated Record distance: _____ Miles c) Determine X/Q from Attachment 2 d) Calculate actual X/Q using current wind speed: $\text{Actual X/Q} = \frac{\text{X/Q from Attachment 2}}{\text{Wind Speed (mph)}} = \underline{\hspace{2cm}}$ e) GO TO Step 8	a) <u>IF</u> X/Q is needed for other distances, <u>THEN</u> GO TO Step 7.

NUMBER EPIP-4.10	PROCEDURE TITLE DETERMINATION OF X/Q	REVISION 11
		PAGE 4 of 6

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
7	DETERMINE CENTERLINE X/Q AT ANY DISTANCE: <ul style="list-style-type: none"> a) Determine distance required for X/Q (miles) Record distance: _____ Miles b) Convert miles to meters: ____ Miles x 1609 = _____ Meters c) Convert wind speed (mph) to meters per second: ____ Wind Speed (mph) x 0.447 = _____ Wind Speed (m/sec) d) Use the distance downwind and Stability Class to determine dispersion coefficients: <ul style="list-style-type: none"> • Horizontal coefficient (σ_y), use Attachment 3 Record σ_y: _____ • Vertical coefficient (σ_z), use Attachment 4 Record σ_z: _____ e) Calculate X/Q: $X/Q = \frac{1}{[(3.14(\sigma_z) (\sigma_y)) + 758] \times [\text{wind speed m/sec}]} = \underline{\hspace{2cm}}$ 	

NUMBER EPIP-4.10	PROCEDURE TITLE DETERMINATION OF X/Q	REVISION 11
		PAGE 5 of 6

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
8	CHECK WHETHER DETERMINATION OF OFF-CENTERLINE X/Q - REQUIRED: a) Use distance downwind and Stability Class to determine off-centerline (Off-CL) σ_y from Attachment 5 Record σ_y (Off-CL): _____ b) Determine distance y, perpendicular to centerline, for which X/Q is to be calculated: 1) Refer to Attachment 6 2) Record distance y: ___ Miles 3) Convert y to Meters: ___ Miles x 1609 = ___ Meters 4) Calculate $y^2 =$ _____ Meters ² c) Solve for x, where x equals: $\sigma_y(\text{Off-CL})(y^2) =$ _____ d) Calculate $e^x =$ _____ e) Record X/Q centerline (from Step 6 or 7): $X/Q_{CL} =$ _____ f) Determine off-centerline X/Q using the following equation: $X/Q_{\text{off-CL}} = \frac{X/Q_{CL}}{e^x} =$ _____	<u>IF</u> off-centerline X/Q calculation <u>NOT</u> required, <u>THEN</u> GO TO Step 9.

NUMBER EPIP-4.10	PROCEDURE TITLE DETERMINATION OF X/Q	REVISION 11 <hr/> PAGE 6 of 6
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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
_____ 9	TERMINATE EPIP-4.10: <ul style="list-style-type: none"> • Give completed EPIP-4.10, forms, and other applicable records to the Radiological Assessment Director/Radiological Assessment Coordinator • Completed By: _____ Date: _____ Time: _____ 	
- END -		

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-4.10	ESTIMATION OF STABILITY CLASS	11
ATTACHMENT		PAGE
1		1 of 5

<u>STEP</u>	<u>ACTION/EXPECTED RESPONSE</u>	<u>RESPONSE NOT OBTAINED</u>
-------------	---------------------------------	------------------------------

NOTE: • Degrees Centigrade (°C) equals 0.56 times the difference between degrees Fahrenheit (°F) and thirty-two: °C = 0.56(°F - 32).

• Telephone numbers listed below are for calls made from the North Anna dialing area.

___ 1.	Call the Dominion Weather Center, 9-1-804-273-3025, and ask for regional meteorological data:	<u>IF NOT</u> available, <u>THEN</u> GO TO Step 4 of Attachment 1.
--------	---	--

- Wind Speed:_____
- Wind Direction (from):_____
- Stability Class:_____
- Temperature:_____

___ 2. Give regional meteorological data to RAD/RAC and State/Local Communicator

___ 3. RETURN TO EPIP-4.10, Step 6

___ 4. Call National Weather Service (NWS), 9-1-800-737-8624, and ask for regional meteorological data:

- Wind Speed:_____
- Wind Direction (from):_____
- Temperature:_____
- Time of sunrise:_____, sunset:_____
- Sky Conditions (e.g., clear, partly cloudy, etc.):_____

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-4.10	ESTIMATION OF STABILITY CLASS	11
ATTACHMENT		PAGE
1		2 of 5

<u>STEP</u>	<u>ACTION/EXPECTED RESPONSE</u>	<u>RESPONSE NOT OBTAINED</u>
___ 5.	Determine time of day: <ul style="list-style-type: none"> • DAYTIME: One hour after sunrise to one hour before sunset • NIGHTTIME: One hour before sunset to one hour after sunrise 	
___ 6.	Determine Stability Class for DAYTIME conditions:	<u>IF NIGHTTIME</u> conditions, <u>THEN</u> GO TO Step 9 of Attachment 1.
	a. Determine Insolation Class Number (ICN) from Table 1: <ol style="list-style-type: none"> 1. Determine nearest date on vertical axis and hour of day on horizontal axis 2. Read ICN from matrix 	
	b. Adjust ICN according to sky conditions	
	<u>AND</u>	
	Determine Net Radiation Index (NRI): <ul style="list-style-type: none"> • CLEAR or SUNNY: No adjustment needed. ICN = NRI • PARTLY SUNNY or PARTLY TO MODERATELY CLOUDY: Decrease ICN by 1. ICN - 1 = NRI <u>IF NRI < 1</u> after adjustment, <u>THEN</u> set NRI to 1 (lower limit for partly sunny or partly to moderately cloudy). • CONTINUOUS CLOUDS, OVERCAST, FOG or PRECIPITATION: ICN and NRI = 0 	
	c. Determine wind speed	
	d. Determine Stability Class using Table 2: <ul style="list-style-type: none"> • Plot wind speed vs NRI 	

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-4.10	ESTIMATION OF STABILITY CLASS	11
ATTACHMENT		PAGE
1		3 of 5

<u>STEP</u>	<u>ACTION/EXPECTED RESPONSE</u>	<u>RESPONSE NOT OBTAINED</u>
___ 7.	Give meteorological data to RAD/RAC and State/Local Communicator	
___ 8.	RETURN TO EPIP-4.10, Step 6	
___ 9.	Determine Stability Class for NIGHTTIME conditions:	
	a. Determine sky condition and Net Radiation Index (NRI):	
	<ul style="list-style-type: none"> • CLEAR: NRI = -2 • PARTLY TO MODERATELY CLOUDY: NRI = -1 • CONTINUOUS CLOUDS, OVERCAST, FOG or PRECIPITATION (Rain, Snow, Drizzle): NRI = 0 	
	b. Determine wind speed	
	c. Determine Stability Class using Table 2:	
	<ul style="list-style-type: none"> • Plot wind speed vs NRI 	
___ 10.	Give meteorological data to RAD/RAC and State/Local Communicator	
___ 11.	RETURN TO EPIP-4.10, Step 6	

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-4.10	ESTIMATION OF STABILITY CLASS	11
ATTACHMENT		PAGE
1		4 of 5

TABLE 1 - INSOLATION CLASS NUMBER (ICN) FOR DAYTIME CONDITIONS

NOTE: * = Daytime conditions do not apply. Use nighttime conditions.

DATE	01 JAN	*	*	1	1	2	2	2	2	2	2	1	*	*	*	*	
	11 JAN	*	*	1	1	2	2	2	2	2	2	1	1	*	*	*	
	21 JAN	*	*	1	1	2	2	2	2	2	2	1	1	*	*	*	
	01 FEB	*	*	1	2	2	2	2	2	2	2	2	1	*	*	*	
	11 FEB	*	*	1	2	2	2	3	3	3	2	2	1	*	*	*	
	21 FEB	*	*	1	2	2	3	3	3	3	3	2	2	1	*	*	*
	01 MAR	*	1	1	2	2	3	3	3	3	3	2	2	1	*	*	*
	11 MAR	*	1	2	2	3	3	3	3	3	3	2	2	1	1	*	*
	21 MAR	*	1	2	2	3	3	3	3	3	3	3	2	2	1	*	*
	01 APR	*	*	1	2	2	3	3	3	3	3	3	3	2	2	1	*
	11 APR	*	1	1	2	3	3	3	3	3	3	3	3	2	2	1	*
	21 APR	*	1	2	2	3	3	3	4	4	4	3	3	2	2	1	*
	01 MAY	*	1	2	2	3	3	4	4	4	4	3	3	2	2	1	*
	11 MAY	*	1	2	2	3	3	4	4	4	4	3	3	3	2	1	1
	21 MAY	*	1	2	2	3	3	4	4	4	4	3	3	3	2	1	1
	01 JUN	1	1	2	2	3	3	4	4	4	4	4	3	3	2	1	1
	11 JUN	1	1	2	3	3	3	4	4	4	4	4	3	3	2	2	1
	21 JUN	1	1	2	2	3	3	4	4	4	4	4	3	3	2	2	1
	01 JUL	1	1	2	2	3	3	4	4	4	4	4	3	3	2	2	1
	11 JUL	*	1	2	2	3	3	4	4	4	4	4	3	3	2	2	1
	21 JUL	*	1	2	2	3	3	4	4	4	4	4	3	3	2	2	1
	01 AUG	*	1	2	2	3	3	4	4	4	4	4	3	3	2	1	1
	11 AUG	*	1	2	2	3	3	4	4	4	4	3	3	3	2	1	1
	21 AUG	*	1	2	2	3	3	3	4	4	4	3	3	2	2	1	*
01 SEP	*	1	1	2	3	3	3	4	3	3	3	3	2	2	1	*	
11 SEP	*	1	1	2	3	3	3	3	3	3	3	3	2	2	1	*	
21 SEP	*	*	1	2	2	3	3	3	3	3	3	3	2	1	1	*	
01 OCT	*	*	1	2	2	3	3	3	3	3	3	2	2	1	*	*	
11 OCT	*	*	1	2	2	3	3	3	3	3	3	2	2	1	*	*	
21 OCT	*	*	1	2	2	2	3	3	3	3	2	2	2	1	*	*	
01 NOV	*	1	1	2	2	3	3	3	2	2	2	1	*	*	*	*	
11 NOV	*	1	1	2	2	2	2	2	2	2	2	1	*	*	*	*	
21 NOV	*	*	1	2	2	2	2	2	2	2	2	1	*	*	*	*	
01 DEC	*	*	1	2	2	2	2	2	2	2	2	1	*	*	*	*	
11 DEC	*	*	1	2	2	2	2	2	2	2	2	1	*	*	*	*	
21 DEC	*	*	1	1	2	2	2	2	2	2	2	1	*	*	*	*	

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HOUR OF DAY														

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-4.10	ESTIMATION OF STABILITY CLASS	11
ATTACHMENT		PAGE
1		5 of 5

TABLE 2 - STABILITY CLASS

NOTE: Wind speed should be rounded to the nearest whole number.

WIND SPEED (mph)	NET RADIATION INDEX (NRI)						
	4	3	2	1	0	-1	-2
0 , 1	A	A	B	C	D	F	G
2 , 3	A	B	B	C	D	F	G
4 , 5 , 6	A	B	C	D	D	E	F
7	B	B	C	D	D	E	F
8	B	B	C	D	D	D	E
9 , 10	B	C	C	D	D	D	E
11 , 12	C	C	D	D	D	D	E
13 , 14	C	C	D	D	D	D	D
≥ 15	C	D	D	D	D	D	D

A - Extremely unstable conditions
 B - Moderately unstable conditions
 C - Slightly unstable conditions
 D - Neutral conditions

E - Slightly stable conditions
 F - Moderately stable conditions
 G - Extremely stable conditions

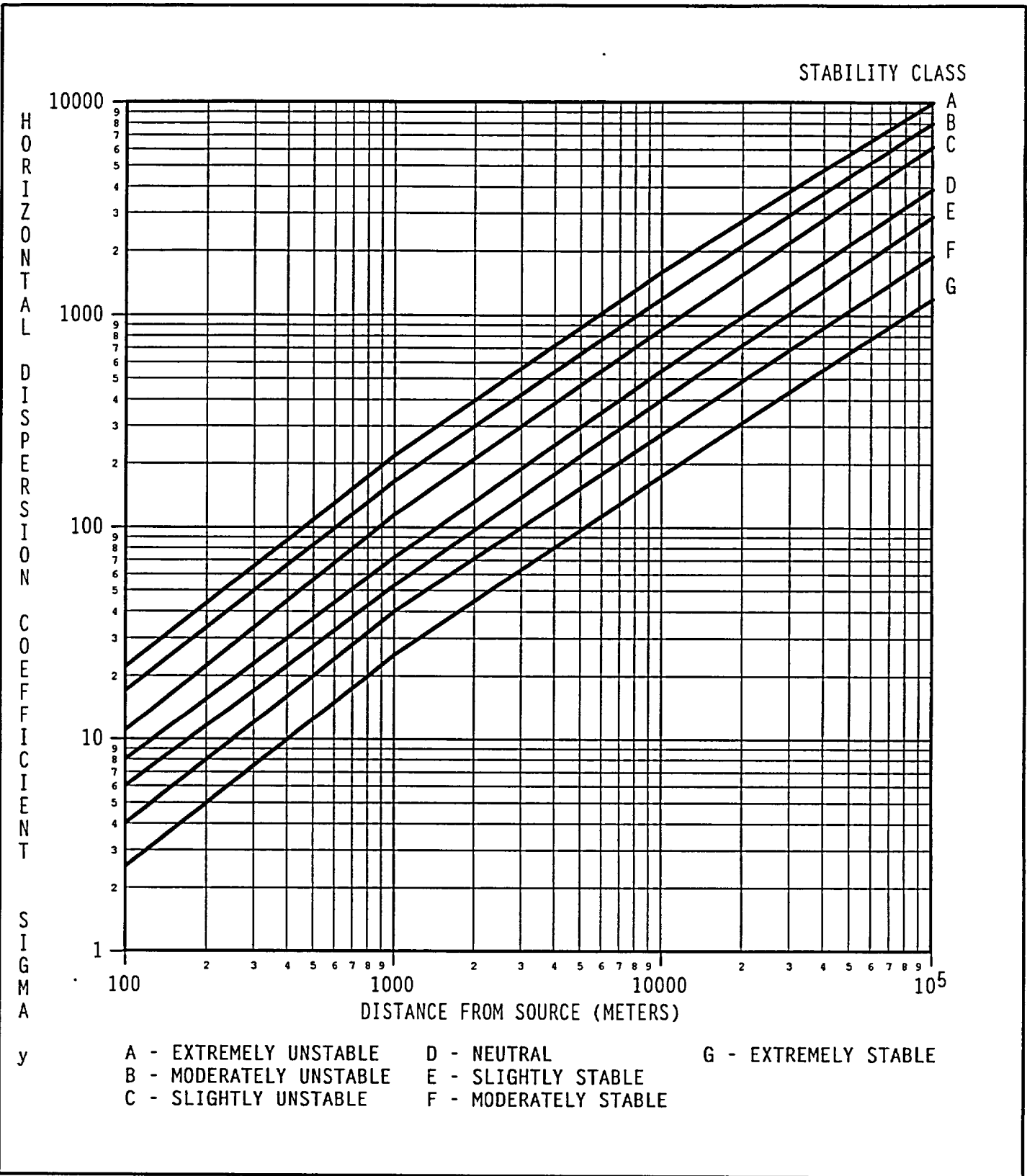
NUMBER	ATTACHMENT TITLE	REVISION
EPIP-4.10	X/Q (SEC/M ³)	11
ATTACHMENT	WIND SPEED = 1 MILE PER HOUR	PAGE
2		1 of 2

<u>DISTANCE</u> (MILES)	A	B	C	D	E	F	G
Site Boundary	1.84 E-6	1.65 E-5	5.98 E-5	1.77 E-4	3.46 E-4	7.26 E-4	1.40 E-3
1.00	1.25 E-6	1.10 E-5	4.50 E-5	1.40 E-4	2.80 E-4	5.90 E-4	1.20 E-3
1.25	1.00 E-6	6.30 E-6	3.10 E-5	9.80 E-5	2.00 E-4	4.50 E-4	9.80 E-4
1.50	8.50 E-7	3.90 E-6	2.20 E-5	7.40 E-5	1.60 E-4	3.50 E-4	8.00 E-4
1.75	7.40 E-7	2.60 E-6	1.70 E-5	5.90 E-5	1.30 E-4	2.80 E-4	6.80 E-4
2.00	6.60 E-7	1.80 E-6	1.40 E-5	4.80 E-5	1.00 E-4	2.40 E-4	5.80 E-4
2.25	5.90 E-7	1.30 E-6	1.10 E-5	4.00 E-5	8.80 E-5	2.00 E-4	5.00 E-4
2.50	5.40 E-7	9.90 E-7	9.30 E-6	3.40 E-5	7.60 E-5	1.80 E-4	4.40 E-4
2.75	4.90 E-7	7.60 E-7	7.90 E-6	2.90 E-5	6.60 E-5	1.50 E-4	3.90 E-4
3.00	4.60 E-7	5.90 E-7	6.90 E-6	2.60 E-5	5.90 E-5	1.40 E-4	3.50 E-4
3.25	4.20 E-7	5.60 E-7	6.00 E-6	2.30 E-5	5.30 E-5	1.20 E-4	3.20 E-4
3.50	4.00 E-7	5.30 E-7	5.30 E-6	2.00 E-5	4.80 E-5	1.10 E-4	2.90 E-4
3.75	3.70 E-7	4.90 E-7	4.70 E-6	1.80 E-5	4.30 E-5	1.00 E-4	2.70 E-4
4.00	3.50 E-7	4.70 E-7	4.20 E-6	1.70 E-5	4.00 E-5	9.30 E-5	2.50 E-4
4.25	3.30 E-7	4.40 E-7	3.80 E-6	1.50 E-5	3.70 E-5	8.60 E-5	2.30 E-4
4.50	3.20 E-7	4.20 E-7	3.50 E-6	1.40 E-5	3.40 E-5	8.00 E-5	2.10 E-4
4.75	3.00 E-7	4.00 E-7	3.20 E-6	1.30 E-5	3.20 E-5	7.40 E-5	2.00 E-4
5.00	2.90 E-7	3.80 E-7	2.90 E-6	1.20 E-5	2.90 E-5	7.00 E-5	1.90 E-4
5.25	2.80 E-7	3.60 E-7	2.70 E-6	1.10 E-5	2.80 E-5	6.50 E-5	1.70 E-4
5.50	2.60 E-7	3.50 E-7	2.50 E-6	1.00 E-5	2.60 E-5	6.10 E-5	1.60 E-4
5.75	2.50 E-7	3.40 E-7	2.30 E-6	9.80 E-6	2.40 E-5	5.80 E-5	1.60 E-4

NUMBER	ATTACHMENT TITLE X/Q (SEC/M ³) WIND SPEED = 1 MILE PER HOUR	REVISION
EPIP-4.10		11
ATTACHMENT		PAGE
2		2 of 2

<u>DISTANCE</u> (MILES)	A	B	C	D	E	F	G
6.00	2.40 E-7	3.20 E-7	2.10 E-6	9.20 E-6	2.30 E-5	5.50 E-5	1.50 E-4
6.25	2.40 E-7	3.10 E-7	2.00 E-6	8.60 E-6	2.20 E-5	5.20 E-5	1.40 E-4
6.50	2.30 E-7	3.00 E-7	1.90 E-6	8.10 E-6	2.10 E-5	5.00 E-5	1.30 E-4
6.75	2.20 E-7	2.90 E-7	1.80 E-6	7.70 E-6	2.00 E-5	4.70 E-5	1.30 E-4
7.00	2.10 E-7	2.80 E-7	1.70 E-6	7.30 E-6	1.90 E-5	4.50 E-5	1.20 E-4
7.25	2.10 E-7	2.70 E-7	1.60 E-6	6.90 E-6	1.80 E-5	4.30 E-5	1.20 E-4
7.50	2.00 E-7	2.60 E-7	1.50 E-6	6.60 E-6	1.70 E-5	4.10 E-5	1.10 E-4
7.75	1.90 E-7	2.60 E-7	1.40 E-6	6.30 E-6	1.70 E-5	4.00 E-5	1.10 E-4
8.00	1.90 E-7	2.50 E-7	1.30 E-6	6.01 E-6	1.60 E-5	3.80 E-5	1.00 E-4
8.25	1.80 E-7	2.40 E-7	1.30 E-6	5.80 E-6	1.50 E-5	3.70 E-5	1.00 E-4
8.50	1.80 E-7	2.40 E-7	1.20 E-6	5.50 E-6	1.50 E-5	3.50 E-5	9.60 E-5
8.75	1.70 E-7	2.30 E-7	1.10 E-6	5.30 E-6	1.40 E-5	3.40 E-5	9.30 E-5
9.00	1.70 E-7	2.20 E-7	1.10 E-6	5.10 E-6	1.40 E-5	3.30 E-5	9.00 E-5
9.25	1.70 E-7	2.20 E-7	1.00 E-6	4.90 E-6	1.30 E-5	3.20 E-5	8.70 E-5
9.50	1.60 E-7	2.10 E-7	1.00 E-6	4.70 E-6	1.30 E-5	3.10 E-5	8.40 E-5
9.75	1.60 E-7	2.10 E-7	9.60 E-7	4.50 E-6	1.20 E-5	3.00 E-5	8.10 E-5
10.00	1.50 E-7	2.00 E-7	9.20 E-7	4.40 E-6	1.20 E-5	2.90 E-5	7.90 E-5

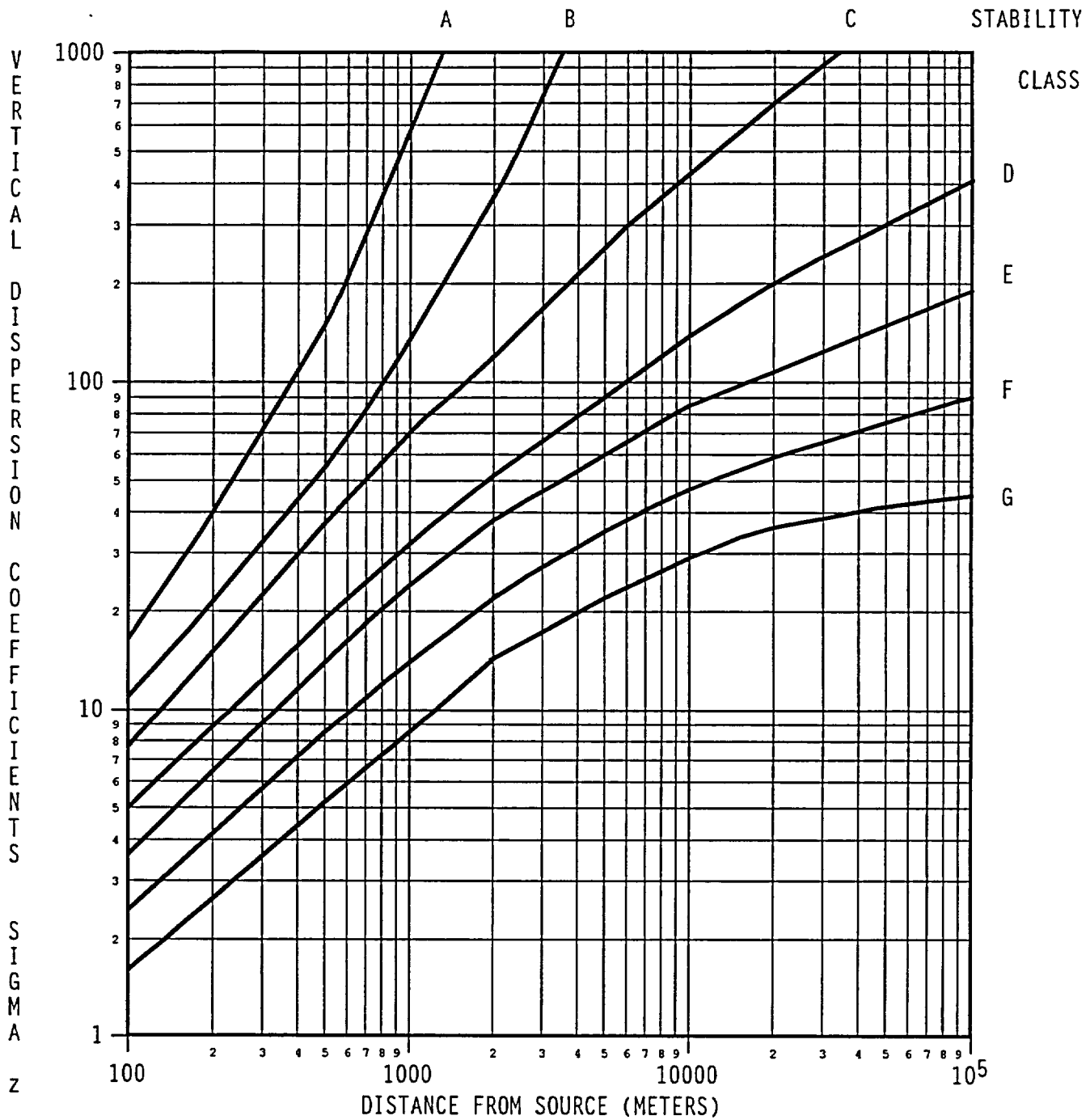
NUMBER	ATTACHMENT TITLE	REVISION
EPIP-4.10	HORIZONTAL DISPERSION COEFFICIENT	11
ATTACHMENT	(σ_y)	PAGE
3	(Source: Reg. Guide 1.145)	1 of 1



NUMBER	ATTACHMENT TITLE	REVISION
EPIP-4.10	VERTICAL DISPERSION COEFFICIENT	11
ATTACHMENT	(σ_z)	PAGE
4	(Source: Reg. Guide 1.145)	1 of 1

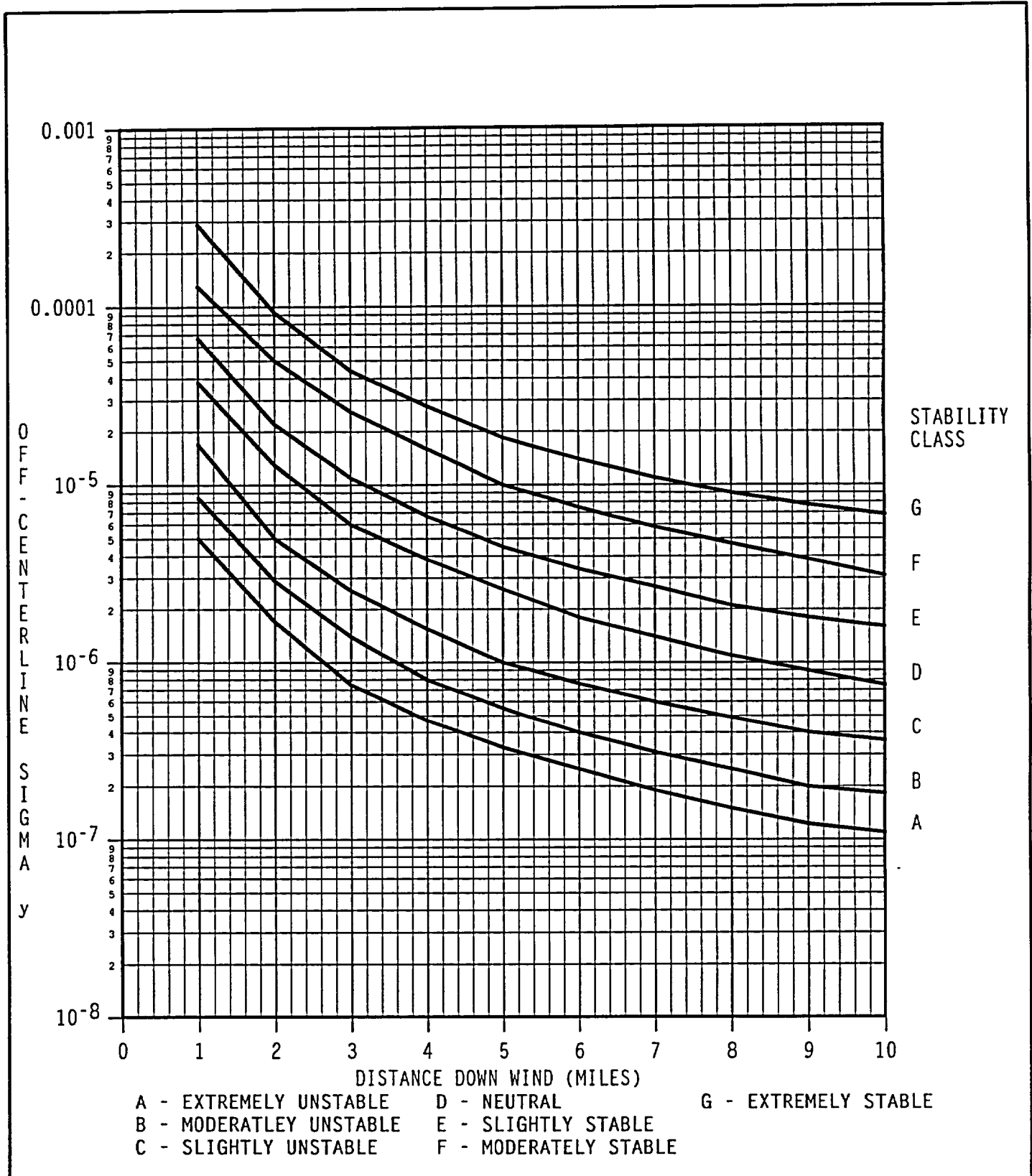
NOTE:

- For Stability Class "A" at greater than 1500 meters, $\sigma_z = 2000$.
- For Stability Class "B" at greater than 5000 meters, $\sigma_z = 2000$.

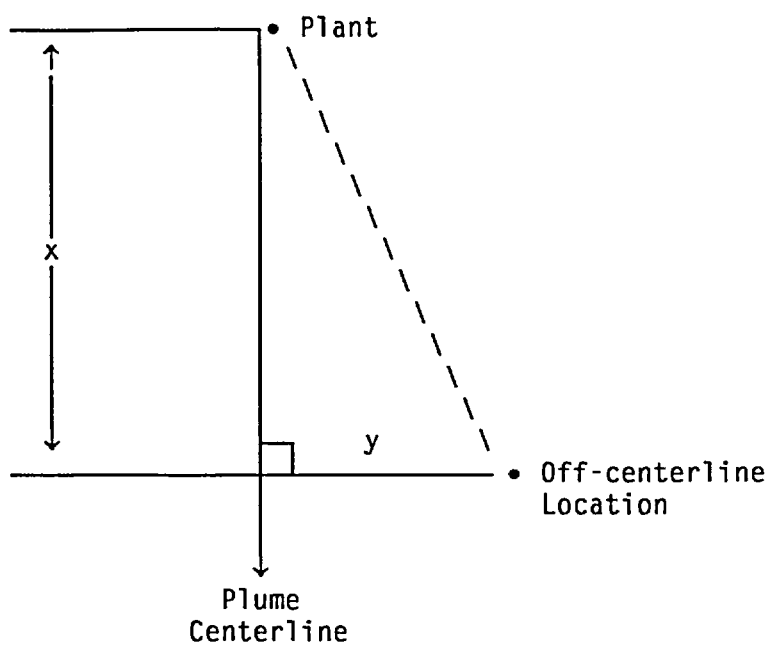


- | | | |
|-------------------------|-----------------------|----------------------|
| A - EXTREMELY UNSTABLE | D - NEUTRAL | G - EXTREMELY STABLE |
| B - MODERATELY UNSTABLE | E - SLIGHTLY STABLE | |
| C - SLIGHTLY UNSTABLE | F - MODERATELY STABLE | |

NUMBER	ATTACHMENT TITLE	REVISION
EPIP-4.10	OFF-CENTERLINE σ_y	11
ATTACHMENT	$\frac{1}{2}(\sigma_y)^2$	PAGE
5	FOR APPLICABLE STABILITY CLASS	1 of 1



NUMBER	ATTACHMENT TITLE	REVISION
EPIP-4.10	OFFCENTER LINE X/Q	11
ATTACHMENT		PAGE
6		1 of 1



x = Downwind distance from plant, in miles, for centerline X/Q.

y = Perpendicular distance from plume centerline location to off-centerline location, in miles.