

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

January 21, 2004

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

Serial No.	04-016
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Docket Nos.	50-280, 281 50-338, 339
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VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)
NORTH ANNA AND SURRY POWER STATIONS
REVISION TO CORPORATE PLAN IMPLEMENTING PROCEDURE

Pursuant to 10 CFR 50.54(q), attached is a revision to Corporate Plan Implementing Procedure. This revision updates previous submittals of the Corporate Plan Implementing Procedures. This revision does not decrease the effectiveness of our Emergency Plan and the plan, as revised, continues to meet the standards of 10 CFR 50.47(b). Please update your manual by performing the actions described in the enclosed tabulation of changes.

Your attention is also directed to the cover page of the enclosed procedure. This page provides a revision summary for the Corporate Plan Implementing Procedure and is intended to facilitate your review of the enclosed material.

No commitments are made by this letter. If you have any questions or require additional information, please contact Mr. David Sommers at (804) 273-2823.

Very truly yours,



Eugene S. Grecheck
Vice President - Nuclear Support Services

Attachments

A045

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Serial No. 04-016
CPIP Revision
Attachment

**VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)
REVISION TO CORPORATE PLAN IMPLEMENTING PROCEDURE**

Enclosed is a recent revision to a Corporate Plan Implementing Procedure (CPIP). Please take the following actions in order to keep your manual updated with the most recent revisions.

Remove	Title	Rev	Date	Insert	Rev	Date
CPIP-6.2	Radiological Assessment Coordinator	7	12/11/02	CPIP-6.2	8	1/7/2004

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



Corporate Emergency Plan Implementing Procedure

Title: Radiological Assessment Coordinator

Procedure Number:

CPIP-6.2

Revision Number:

8

Effective Date:

1/7/2004

Revision Summary:

- Add clarification regarding frequency for updating Radiological Status reports for changing conditions (Step 8.g).
- Updated position title (Step 13)
- Add default Total Effective Dose Equivalent (TEDE)/Direct Dose Equivalent (DDE) ratio for unfiltered fuel handling accident developed using alternate source term assumptions (Attachment 2, Default Accident-Type Specific TEDE/DDE Ratios).

Approvals on File

RADIOLOGICAL ASSESSMENT COORDINATOR

(Initials)

___ 1. Assign the following EIPs to the Dose Assessment Team, as deemed necessary:

- EIP-4.03, DOSE ASSESSMENT TEAM CONTROLLING PROCEDURE
- EIP-4.08, INITIAL OFFSITE RELEASE ASSESSMENT
- EIP-4.30, USE OF MIDAS CLASS A MODEL
- EIP-4.31, USE OF MIDAS CLASS B MODEL

NOTE: A minimum of 2 (two) Offsite Monitoring Teams must be dispatched (i.e., sent into the field) at a Site Area Emergency or higher emergency class.

___ 2. Assign EIP-4.34, FIELD TEAM RADIO OPERATOR INSTRUCTIONS, to the Field Team Radio Operator:

- a) Assure Field Team Radio Operator tracks Offsite Monitoring Team personnel dose.
- b) Give Field Team Radio Operator thresholds (exposure limits) for reporting Offsite Monitoring Team exposure (TEDE and Thyroid CDE).
- c) Ask Field Team Radio Operator to alert staff if Offsite Monitoring Team exposure limits (TEDE or Thyroid CDE) may be met.

NOTE: The Health Physics Network (HPN) is established after the NRC announces over the Emergency Notification System (ENS, located in the TSC) that HPN communications is desired. The HPN Communicator may be assigned other duties until this occurs.

___ 3. Assign EIP-4.33, HEALTH PHYSICS NETWORK COMMUNICATIONS, to the HPN Communicator.

___ 4. IF in LEOF, THEN verify facility surveillance procedures implemented:

- EIP-4.28, TSC/LEOF RADIATION MONITORING SYSTEM (North Anna)
- EIP-4.29, TSC/LEOF RADIATION MONITORING SYSTEM (Surry)
- EIP-4.18, MONITORING OF LEOF (North Anna or Surry)

___ 5. IF emergency radiation exposure may be required for Offsite Monitoring Team members or LEOF staff (exposure GREATER THAN 5 Rem TEDE), THEN request Radiological Assessment Director initiate EIP-4.04, EMERGENCY PERSONNEL RADIATION EXPOSURE.

- ___ 6. IF KI authorization may be required for Offsite Monitoring Team members or LEOF staff (exposure GREATER THAN 25 Rem Thyroid CDE), THEN initiate EPIP-5.07, ADMINISTRATION OF RADIOPROTECTIVE DRUGS.

NOTE:

- Dose assessment results may need to be further explained to other emergency responders in terms of the accident type used, application of default values, assumed release pathways and MIDAS averaging functions.
- EPIP-4.30, USE OF MIDAS CLASS A MODEL, Attachment 2, Design Basis Accident Technical Overview, includes a discussion of technical bases related to the development of dose projections.

- ___ 7. IF the following table indicates a classification higher than that in effect,

DOSE PROJECTION RESULTS	CLASSIFICATION
≥ 1 Rem TEDE or 5 Rem Thyroid CDE	GENERAL EMERGENCY
≥ 100 mrem TEDE or 500 mrem Thyroid CDE	SITE AREA EMERGENCY
$\geq 1000\%$ of Release Limit	ALERT
$\geq 100\%$ of Release Limit	NOTIFICATION OF UNUSUAL EVENT
$< 100\%$ of Release Limit	N/A

THEN notify the following personnel immediately:

- Recovery Manager
- Radiological Assessment Director

- ___ 8. Coordinate review and distribution of offsite release assessment results:
- a) Assure MIDAS Run # recorded on all pages of each MIDAS run.
 - b) Initial each page to document RAC approval for issuance of results.
 - c) Review offsite release assessment results with the Recovery Manager.

(Step 8 continued on following page)

8. Coordinate review and distribution of offsite release assessment results: (continued)

d) IF any of the following conditions apply,

- release of radioactive material is occurring
- release of radioactive material has occurred and is terminated
- release of radioactive material is projected to occur

THEN do the following:

- 1) Give Radiological Status Report to State/Local Communicator immediately.
- 2) Give Special Report to LEOF Services Coordinator for distribution (CERC Administrative Services Manager if in CEOF).
- 3) GO TO Step 8.f

e) IF conditions specified in Step 8.d do NOT apply, THEN give the following reports to the LEOF Services Coordinator for distribution (CERC Administrative Services Manager if in CEOF):

- Radiological Status Report
- Special Report

f) Review offsite release assessment results with the following:

- Virginia Department of Health (VDH) State Radiological Assessment Officer as soon as practical (if present)
- NRC Incident Response Team Protective Measures Coordinator (if present)
- RAD (in TSC) or TSC Dose Assessment Team representative
- Radiological representative in CERC (if available)

g) IF release of radioactive material is occurring, has occurred and is terminated or is projected to occur, THEN give State/Local Communicator information needed to complete EPIP-2.01, NOTIFICATION OF STATE AND LOCAL GOVERNMENTS, Attachment 3, Report of Radiological Conditions to the State:

- Give updates every 60 minutes during an Alert or higher classification
- Within 15 minutes after a classification upgrade
- When radiological conditions change (only significant changes need to be provided more frequently than every 60 minutes or following a classification change, e.g., a change causing a modification to offsite protective actions)

- ___ 9. IF a General Emergency is declared, THEN implement EPIP-4.07, PROTECTIVE MEASURES.

NOTE:

- Dose assessment results may need to be further explained to other emergency responders in terms of the accident type used, application of default values, assumed release pathways and MIDAS averaging functions.
- CPIP-6.2, RADIOLOGICAL ASSESSMENT COORDINATOR, Attachment 1, Comparison of Dose Assessment Codes: RASCAL Versus MIDAS, provides a summary of differences between the models.

- ___ 10. Coordinate offsite dose assessment activities with non-utility emergency responders:

a) Give updates to the following (if present):

- Virginia Department of Emergency Management (DEM) On-Scene Coordinator
- Virginia Department of Health (VDH) State Radiological Assessment Officer
- NRC Incident Response Team Protective Measures Coordinator

b) Ask VDH and NRC representatives if information to operate RASCAL is needed. (Some of this data appears on the MIDAS Special Report.) Data needed by VDH and NRC may include (but not be limited to) the following:

- Source term (based on release rate, concentration, user specified mix, plant conditions, containment monitors)
- Shutdown time
- Hold-up time (e.g., time between release to containment and release to environment)
- Meteorology (wind speed, wind direction, stability class, precipitation)

c) Notify VDH and NRC representatives about the following:

- Casualty-specific TEDE/DDE ratio (based on effluent sample analysis or MIDAS estimate appearing on Radiological Status report). IF casualty-specific TEDE/DDE ratio NOT available, THEN provide appropriate site-specific value from Attachment 2, Default Accident-Type Specific TEDE/DDE Ratios.
- Decision to administer potassium iodide to licensee emergency workers

- ___ 11. Give updates to Recovery Manager as conditions change or as information becomes available regarding the following:

- Offsite Release Assessment
- Radiological trends
- Protective Action Recommendations

NOTE: Ping-3B Alert and High Alarms represent the following conditions:

Alert Alarm: Setpoint at which staytime in facility for event duration of 4 weeks (12 hour shifts at 6 days per week) would yield an emergency worker exposure of 5 Rem TEDE and/or 50 Rem Thyroid CDE.

High Alarm: Setpoint established at 10 times the Alert Alarm setpoint, at which emergency worker TEDE and/or Thyroid CDE limits would be exceeded in about 1 day of continuous occupancy.

___ 12. **IF** LEOF activated and its habitability potentially affected by changes in radiological or meteorological conditions, **THEN** do the following:

- a. Evaluate HVAC for possible re-alignment.
- b. Check pressure gauge for positive pressure when operating in Emergency Mode.
- c. Assure pressure boundary doors are closed so that positive pressure is maintained:

Doors between LEOF Security area, Training Building and outside exits
LEOF rear exit doors

- d. Consider limiting eating and drinking in facility.
- e. Notify Recovery Manager about habitability restrictions and actions taken

___ 13. **WHEN** directed by Recovery Manager to enter Recovery or to secure from the emergency, **THEN** do the following:

Evaluate need for continued use of offsite teams for data/sample collection.

IF in LEOF, **THEN** have HP restore LEOF HVAC to Normal Mode (refer to EPIP-4.18).

Assure Offsite Teams are informed of status.

Review EPIP-6.01, RE-ENTRY/RECOVERY GUIDELINE, Attachment 2, Plume Pathway Assessment Guideline.

Give completed forms and records to the LEOF Services Coordinator (CERC Plan/Design/Construction Manager if in CEOF).

**ATTACHMENT 1:
COMPARISON OF DOSE ASSESSMENT CODES:
RASCAL VERSUS MIDAS**

PARAMETER	RASCAL *	MIDAS
SOURCE TERM	Nuclide specific and gross release rates. Percent nuclide mix category. Plant conditions based (NUREG-1228). Isotopic, core damage estimates, monitored releases, containment air samples, containment monitor, and spent fuel accident source terms available. Decay after reactor shutdown. Decay during containment holdup.	Default accident mixes. PCS/ERFCS input (monitor indications): <ul style="list-style-type: none"> 15 min. processing User specified data. Nuclide specific release rates. WASH-1400, NUREG 1228 mix options available. User specified event/release timing for decay.
DISPERSION	Straight line Gaussian (TADPLUME). Lagrangian Puff (TADPUFF).	Gaussian straight line, plume segmented for constant met (Model 3). Gaussian plume segmented for variable met (Model 5). Eight organs, seven pathways, 80 receptor locations.
METEOROLOGY	User specified. Ground level with mixing layer height. No mixed mode releases. Puff trajectory uses spatial and temporal varying meteorological conditions. Wet and dry deposition. Deposition velocity: 0.003 m/sec. Non-documented building wake correction methodology. Wind speed: <ul style="list-style-type: none"> No correction from height of measurement to height of release. 	PCS/ERFCS input: <ul style="list-style-type: none"> 5 - 10 second sampling 15 min. averaging Hourly processing User defined. Ground, elevated or mixed mode. Precipitation entry available. Wet and dry depletion. Deposition velocity: <ul style="list-style-type: none"> 0.01, Iodines 0.001, Particulates Building wake factor: <ul style="list-style-type: none"> Reg. Guide 1.145 Virtual source
OUTPUT	Maximum doses for 10, 25 and 50 miles: <ul style="list-style-type: none"> User specified at 0.1 mile increments Default distances at 0.5 mile increments Not necessarily centerline Plume characterization for individual releases: <ul style="list-style-type: none"> Location, dose Specific location of maximum dose Ground shine and cloud shine (Federal Guidance Report No. 12) Open/Closed Window Dose Rates 	EPIP-2.01, Attachment 3: Report of Radiological Conditions to the State. Centerline and off-centerline dose rates and integrated doses for Site Boundary, 2, 5 and 10 miles: <ul style="list-style-type: none"> TEDE, THY CDE 4-day Dose rates TEDE/DDE Ratio Various plots, prints and reports.

* NUREG 1741, RASCAL 3.0: Description of Models and Methods

**ATTACHMENT 2:
DEFAULT ACCIDENT-TYPE SPECIFIC TEDE/DDE RATIOS**

**Table 1
North Anna Power Station**

ACCIDENT TYPE		TEDE/DDE RATIO
MSLB	Main Stem Line Break	50
SGTR	Steam Generator Tube Rupture	3
Fuel Handling	Fuel Handling	1.5
WGDT Rupture	Waste Gas Decay Tank Rupture	1
VCT Rupture	Volume Control Tank Rupture	1
LOCA with melt	Loss of Coolant Accident with melt	4
LOCA, no melt	Loss of Coolant Accident with no melt	2
Locked Rotor	Locked Rotor	13

**Table 2
Surry Power Station**

ACCIDENT TYPE		TEDE/DDE RATIO
MSLB	Main Stem Line Break	49
SGTR	Steam Generator Tube Rupture	26
Fuel Handling (Filtered)	Fuel Handling (Filtered)	1.5
Fuel Handling (Unfiltered)	Fuel Handling (Unfiltered)	5
WGDT Rupture	Waste Gas Decay Tank Rupture	1
VCT Rupture	Volume Control Tank Rupture	1
LOCA	Loss of Coolant Accident	3
Locked Rotor	Locked Rotor	13
SRF	Surry Radwaste Facility	1