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April 30, 2003

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

Subject: Oconee Nuclear Station
Docket Nos. 50-269, -270, -287
Emergency Plan Implementing Procedures Manual
Volume C Revision 2003-04

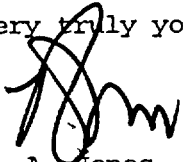
Please find attached for your use and review copies of the revision to the
Oconee Nuclear Station Emergency Plan: Volume C Revision 2003-04, April 2003.

This revision is being submitted in accordance with 10 CFR 50-54(q) and does
not decrease the effectiveness of the Emergency Plan or the Emergency Plan
Implementing Procedures.

Any questions or concerns pertaining to this revision please call Rodney Brown,
Emergency Planning Manager at 864-885-3301.

By copy of this letter, two copies of this revision are being provided to the
NRC, Region II, Atlanta, Georgia.

Very truly yours,



R. A. Jones.
VP, Oconee Nuclear Site

xc: (w/2 copies of attachments)
Mr. Luis Reyes,
Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
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w/copy of attachments
Mr. James R. Hall
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(w/o Attachments, Oconee Nuclear Station)
NRC Resident Inspector
J. R. Brown, Manager, Emergency Planning

A045

April 30, 2003

OCONEE NUCLEAR SITE
INTRASITE LETTER

SUBJECT: Emergency Plan Implementing Procedures
Volume C, Revision 2003-04

Please make the following changes to the Emergency Plan Implementing Procedures Volume C by following the below instructions.

REMOVE

Cover Sheet - Rev. 2003-03

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HP/0/B/1009/022 - 08/15/03

RP/0/B/1000/029 - 03/13/03

Functional Area Directive 102
SSG Emergency Response Plan
03/01/01

ADD

Cover Sheet Rev. 2003-04

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HP/0/B/1009/022 - 04/08/03

RP/0/B/1000/029 - 04/22/03


Functional Area Directive 102
SSG Emergency Response Plan
04/30/03

DUKE POWER

EMERGENCY PLAN
IMPLEMENTING PROCEDURES
VOLUME C



APPROVED:


W. W. Foster, Manager
Safety Assurance

04/30/2003
Date Approved

04/30/2003
Effective Date

VOLUME C
REVISION 2003-04
April 2003

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Revision 2003-04
April 2003

(R04-01)
**INFORMATION
ONLY**
REPARATION

Duke Power Company
PROCEDURE PROCESS RECORD

(1) ID No. HP/0/B/1009/022
Revision No. 010

(2) Station Oconee Nuclear Station

(3) Procedure Title On-Shift Off-Site Dose Projections

(4) Prepared By  Eric Lampe Date 02/26/03

(5) Requires NSD 228 Applicability Determination? *If Applicability Determination is required, attach NSD 228 documentation.*

☒ Yes (New procedure or revision with major changes)

☐ No (Revision with minor changes)

☐ No (To incorporate previously approved changes)

(6) Reviewed By W. J. Berkshire (QR) Date 2/26/03

Cross-Disciplinary Review By —NA— (QR) NA Date 2/26/03

Reactivity Mgmt. Review By —NA— (QR) NA Date 2/26/03

Mgmt. Involvement Review By —NA— (Ops. Supt.) NA Date 2/26/03

(7) Additional Reviews

QA Review By _____ Date _____

Reviewed By _____ Date _____

Reviewed By _____ Date _____

(8) Temporary Approval (*if necessary*)

By _____ (OSM/QR) Date _____

By _____ (QR) Date _____

(9) Approved By J. A. Tencig Date 4/08/03

PERFORMANCE (*Compare with control copy every 14 calendar days while work is being performed.*)

(10) Compared with Control Copy _____ Date _____

Compared with Control Copy _____ Date _____

Compared with Control Copy _____ Date _____

(11) Date(s) Performed _____

Work Order Number (WO#) _____

COMPLETION

(12) Procedure Completion Verification

☐ Yes ☐ NA Check lists and/or blanks initialed, signed, dated, or filled in NA, as appropriate?

☐ Yes ☐ NA Required enclosures attached?

☐ Yes ☐ NA Data sheets attached, completed, dated, and signed?

☐ Yes ☐ NA Charts, graphs, etc. attached, dated, identified, and marked?

☐ Yes ☐ NA Procedure requirements met?

Verified By _____ Date _____

(13) Procedure Completion Approved _____ Date _____

(14) Remarks (*Attach additional pages, if necessary*)

Duke Power Company
Oconee Nuclear Station

On-Shift Off-Site Dose Projections

Reference Use

Procedure No.

HP/0/B/1009/022

Revision No.

010

Electronic Reference No.

OX0092T4

On-Shift Off-Site Dose Projections

1. Purpose

- 1.1 This procedure provides guidance for on-shift personnel to perform initial off-site dose projections using Raddose V.
- 1.2 This procedure is an Emergency Plan Implementing Procedure (EPIP). It must be forwarded to the Emergency Planning Group within three working days of approval by the responsible group. {PIP 4-O-93-0701}

2. References

- 2.1 Earth Tech Raddose V Computer Program Documentation
- 2.2 EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents
- 2.3 Letter from M. S. Tuckman to USNRC, dated January 15, 1997, "Capability for On-Shift Dose Assessment at Catawba, McGuire, and Oconee Nuclear Sites"
- 2.4 PIP 4-O-93-701, Distribution of Emergency Plan Procedures

3. Limits And Precautions

- 3.1 This procedure may be performed in sections or parts. Steps may be performed in any order necessary to project off-site dose.
- 3.2 This procedure is initiated at the request of the Operations Shift Manager/Emergency Coordinator. The following information should be requested from the OSM/EC. The OSM/EC should provide the following information if available:
 - Affected unit(s).
 - Current Emergency Classification.
 - Accident type:
 - LOCA (Loss of Coolant Accident) with a Unit Vent release path.
 - SGTR (Steam Generator Tube Rupture) with a Main Steam Relief Valve release path.
 - Time period when Main Steam Relief Valves were lifted.
- 3.3 Computers with Raddose V are located in the RP Shift Lab (including laptop), TSC, OSC and the OSC Briefing Room.

3.4 The following criteria apply to Protective Action Recommendations (PARs):

- A General Emergency must be declared prior to Protective Action Recommendations.
- Equipment failures and plant parameters other than RIA indications would typically result in General Emergency declaration and PARs. It is possible however that a General Emergency could be declared and the appropriate PARs recommended due to off site dose projections.
- **IF** a General Emergency is declared from the Control Room prior to the TSC being officially activated, default PARs should be recommended. Default PARs include evacuation out to 5-miles around the plant (A0, A1 through F1) and shelter zones greater than 5 miles (A2 through F2). On-Shift Offsite Dose projections are used to determine if any zones greater than 5 miles should be recommended for evacuation.

4. Procedure

4.1 **IF** this procedure is being used for a drill, perform the following:

- 4.1.1 Select DAS (Dose Assessment Software) icon on applicable computer.
- 4.1.2 Select affected Oconee unit.
- 4.1.3 **GO TO** Step 4.53.

NOTE: If network (PI Server) is down, an error message will be displayed that the network is unavailable. Dose assessment software should work in the manual mode on an operable dose assessment computer.

4.2 Select DAS (Dose Assessment Software) icon on applicable computer.

4.3 **IF** DAS (Dose Assessment Software) will **NOT** operate on any dose assessment computer, perform the following:

- Notify OSM / Emergency Coordinator that off-site dose assessment **CANNOT** be performed by Shift Radiation Protection.
- Exit this procedure.

4.4 Select affected Oconee unit.

NOTE: The computer network (PI server) must be available to operate in the "Automatic" mode. An error message will appear if the PI server is not available.

4.5 Select "Automatic".

- 4.6 **IF** computer network (PI server) is **NOT** available, **GO TO** Step 4.51.
- 4.7 Single-click left mouse button on "Accident Mode".
- 4.8 Edit reactor trip time.
- 4.9 Edit release time.
 - 4.9.1 **IF** actual release time is **NOT** known, input a time 15 minutes before current time (Example: current time is 0800 hours. The correct input is 0745).
- 4.10 Enter initials.
- 4.11 Select "Accept".
- 4.12 Select accident type.

NOTE: After "Enter/Edit Meteorological Data" is selected, the meteorological data page will appear with Step 1 data fields blank. These fields will populate automatically. There is no indication that the computer is "thinking" and it may take as long as 20 seconds for the fields to automatically populate.

- 4.13 Select "Enter/Edit Meteorological Data".
- 4.14 **IF** manual meteorological data entry is required, perform the following:
 - 4.14.1 **IF** SDS is available, collect meteorological data from SDS **AND** record on Enclosure 5.1.

NOTE:

- Manual meteorological charts and data are **NOT** available in the Control Rooms. Meteorological data in the Control Room is located on the Operator Aid Computer (OAC).
- **IF** possible, meteorological data should be obtained from an unaffected Unit's Control Room.

- 4.14.2 **IF** the following conditions exist, collect data available from Control Room OAC **AND** record on Enclosure 5.1:
 - Computer network (PI Server) is down
 - SDS is **NOT** available.
 - Operations resources are available in Control Room to assist.

4.14.3 **IF** the following conditions exist, utilize procedure defaults located in Enclosure 5.1:

- Computer network (PI Server) is down
- SDS is **NOT** available.
- Control Room OAC indications are **NOT** available

4.15 Select "Accept" after data fields have populated.

4.16 Select "Enter/Edit Source Term Data".

NOTE: **IF** LOCA is selected, the preferred order of Unit Vent RIA selection is RIA-45, RIA-46, RIA-56. The RIA must be on scale ($<1E7$ cpm).

4.17 **IF** the following conditions exist, perform the following:

- LOCA was selected
- It is desired to change the RIA used to calculate the source term.

4.17.1 Double click on "UV1L" on the appropriate "Step Num" row located in the "NG Method" column.

NOTE: RIAs for all three units are located in pop up box. Ensure correct Unit and RIA are selected.

4.17.2 Double click on the grey box on the left side of the row in which the desired RIA is located.

4.17.3 Select "Yes" when prompted "Are you sure you want to change noble gas method?"

NOTE: Either RIA-16 or RIA-17 is used for SGTR. The RIA with the highest reading should be used.

- 4.18 **IF** SGTR was selected, enter Main Steam Relief Valve flow rates as follows:
- 4.18.1 **IF** the initial dose projection is being performed and Main Steam Relief valves lifted during OR prior to the time period of the dose projection, enter "4.5E6" in the flow rate column next to "SG-A" and "SG-B".
- 4.18.2 **IF** the initial dose projection is being performed and the Main Steam Relief valves were NOT lifted during OR prior to the time period of the dose projection, enter "0" in the flow rate column next to "SG-A" and "SG-B".
- 4.18.3 **IF** a subsequent (non-initial) dose projection is being performed and the Main Steam Relief valves lifted during the time period of the dose projection, enter "4.5E6" in the flow rate column next to "SG-A" and "SG-B".
- 4.18.4 **IF** a subsequent (non-initial) dose projection is being performed and the Main Steam Relief valves were NOT lifted during the time period of the dose projection, enter "0" in the flow rate column next to "SG-A" and "SG-B".
- 4.19 Select "Accept".
- 4.20 Select "Emergency Classification".
- 4.21 Select the current emergency classification.
- 4.22 **IF** General Emergency was selected, select "No" when prompted "Is there Condition 3 Failed Fuel?"

NOTE: **IF** current releases are less than normal operating limits, the box above the "Continue" and "GE PARs" buttons will indicate "Release < Normal Operating Limits" after calculations have been performed.

- 4.23 **IF** the following conditions exist, select "Start Auto Mode w/ Auto Reports":
- Manual meteorological data entry was NOT required.
 - Manual source term (RIA) data entry was NOT required.
 - A printer is available.

- 4.24 **IF** "Start Auto Mode w/ Auto Reports" was selected, perform the following:
- 4.24.1 Select "Yes" to use Automatic Print mode.
 - 4.24.2 **WHEN** the first report has printed, **GO TO** Step 4.46.
- 4.25 Select "Perform Calculations".
- 4.26 **IF** the following conditions exist, select "GE PARs":
- General Emergency was selected
 - It is desired to observe protective action recommendations.
- 4.27 Select "Continue".
- 4.28 Select "Go to Report Menu".
- 4.29 **IF** a printer is available, perform the following:
- 4.29.1 select "Print Summary Form".
 - 4.29.2 Select "Print".
- 4.30 **IF** a printer is **NOT** available, perform the following:
- 4.30.1 Select "View Reports" to view "Real Time Mode Summary Report".
 - 4.30.2 Record applicable data on Enclosure 5.2.
 - 4.30.3 Select "done".
- 4.31 Select "Return to Output Menu".
- 4.32 Select "Return to Main Menu".
- 4.33 Select "Perform Forecast".
- 4.34 **IF** General Emergency was previously selected, select "No" when prompted "Is there Condition 3 Failed Fuel?"
- 4.35 Enter "1" for the forecast period in hours.
- 4.36 Select "OK".
- 4.37 When prompted "Note: Forecast will use the source term and meteorological data from Step (current step number). Continue?", select "OK".

- 4.38 Select "Continue".
- 4.39 When prompted "Do you want to save PAZs identified in the forecast mode for identification?", select "Yes".
- 4.40 Select "Go to Report Menu".
- 4.41 **IF** a printer is available, select "Print Green Form".
- 4.42 **IF** a printer is **NOT** available, perform the following:
 - 4.42.1 Select "View Reports".
 - 4.42.2 Select "Green Form" from the "tab" located along the bottom of the Forecast report.
 - 4.42.3 Record applicable data on Enclosure 5.3.
 - 4.42.3.1 Refer to Enclosure 5.4 as necessary to assist in the completion of the emergency notification form.
 - 4.42.4 Select "done".
- 4.43 Select "Return to Output Menu".
- 4.44 Select "Return to Main Menu".
- 4.45 When prompted "You just completed a forecast. Remember to check the meteorological and source term data for current information.", Select "OK".
- 4.46 Contact OSM / Emergency Coordinator and perform the following:
 - 4.46.1 Notify Emergency Coordinator of dose projection results.
 - 4.46.2 **IF BOTH** of the following conditions exist, the General Emergency classification should be recommended to the Emergency Coordinator:
 - General Emergency has **NOT** already been declared

NOTE: Projected dose is dose that has <u>NOT</u> already been received
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- 1 rem or greater TEDE **OR** 5 rem or greater CDE thyroid dose is projected.

- NOTE:**
- Projected doses of 1 rem TEDE or 5 rem CDE will result in a General Emergency declaration if has not already been declared. When a General Emergency is declared, sectors A0 and A1 through F1 are automatically evacuated.
 - Projected dose is dose that has **NOT** already been received.

4.46.3 **IF** dose projection in a particular zone (A2, B2, C2, D2, E2, F2) results in either of the following conditions, recommended evacuation of the zone(s):

- 1 rem or greater TEDE projected dose.
- 5 rem or greater CDE thyroid projected dose.

4.46.4 Ask if additional dose projections are required.

4.47 **IF** the following conditions exist, **GO TO** Step 4.13:

- Additional dose projections are required.
- Manual data entry is required.

4.48 **IF** additional dose projections are **NOT** required, turn over dose assessment responsibilities to the TSC Dose Assessment Liaison when contacted.

4.49 Complete Procedure Process Record sign-off:

4.49.1 Transfer completed Procedure Process Record, Raddose V sheets and Enclosure 5.1, 5.2 and 5.3 to Radiation Protection Staff personnel.

4.50 Exit this procedure.

- NOTE:**
- The preferred order for Unit Vent RIA data collection for LOCA is RIA-45, RIA-46, RIA-56. The RIA must be on scale ($<1E7$ cpm).
 - Either RIA-16 or RIA-17 is used for SGTR. The RIA with the highest reading should be used.

4.51 **IF** Computer network (PI Server) is down **AND** SDS is available, collect the following data:

- RIA reading from the RIA with the highest on scale reading above background in the release pathway.
- **IF** the event is a LOCA, obtain Unit Vent flow rate data from SDS.

NOTE: An Operator may or may not be available to gather RIA information from the affected Units Control Room.

- 4.52 **IF** the following conditions exist, contact the Emergency Coordinator or affected units Control Room to determine if RIA indications are available.
- Computer network (PI Server) is down
 - SDS is **NOT** available.
- 4.52.1 **IF** RIA indications are available, request information regarding the RIA with the highest reading above background in the release pathway.
- 4.52.2 **IF** RIA indications are **NOT** available, perform the following:
- Notify OSM / Emergency Coordinator that off-site dose assessment **CANNOT** be performed by Shift Radiation Protection
 - Exit this procedure.
- 4.53 Select "Normal".
- 4.54 Select "Accident Mode".
- 4.55 Select "Manual" when asked "Do you want to use the PI server data from the network or manual data entry?"
- 4.56 Select "Begin New Incident".
- 4.57 Select "Yes" to continue.
- 4.58 Edit reactor trip time.
- 4.59 Edit release time:
- 4.59.1 **IF** actual release time is **NOT** known, input a time 15 minutes before current time (Example: current time is 0800 hours. The correct input is 0745).
- 4.60 Enter initials.
- 4.61 Select "Accept".

NOTE 4.62: After "Enter/Edit Meteorological Data" is selected, the message "No automatic meteorological data available. Enter data manually" will appear.

4.62 Select "Enter/Edit Meteorological Data".

4.63 **IF** SDS is available, collect meteorological data from SDS **AND** record on Enclosure 5.1.

NOTE:

- Manual meteorological charts and data are **NOT** available in the Control Rooms. Meteorological data in the Control Room is located on the Operator Aid Computer (OAC).
- **IF** possible, meteorological data should be obtained from an unaffected Unit's Control Room.

4.64 **IF** the following conditions exist, collect data available from Control Room OAC **AND** record on Enclosure 5.1:

- Computer network (PI Server) is down
- SDS is **NOT** available
- Operations resources are available in Control Room to assist.

4.65 **IF** the following conditions exist, utilize procedure defaults located in Enclosure 5.1.

- Computer network (PI Server) is down
- SDS is **NOT** available.
- Control Room OAC indications are **NOT** available.

NOTE: The "F9" key may have to be pressed more than once before the data is accepted.

4.66 Press the "F9" key after data fields have populated.

4.67 Select "Enter/Edit Source Term Data".

4.68 Double click in the "Accident Type" box labeled "None" in the current "Step Num" row.

NOTE: Accident types for all three units are located in pop up box. Ensure correct unit and accident type are selected.

4.69 Choose the accident type by double clicking or pressing enter on the desired accident type.

4.70 Double click in the "NG Method" in the current "Step Num" row.

- NOTE:**
- RIAs for all three units are located in pop up box. Ensure correct Unit and RIA are selected.
 - The preferred order for Unit Vent RIA selection for LOCA is RIA-45, RIA-46, RIA-56. The RIA must be on scale ($<1E7$ cpm).
 - Either RIA-16 or RIA-17 is used for SGTR. The RIA with the highest reading should be used.

4.71 Double click on the grey box on the left side of the row in which the desired RIA is located.

4.72 **IF** LOCA was selected accident type, perform the following:

4.72.1 Select "OK" when prompted for "Hold-up Time/Filter Status/Spray Status".

4.72.2 Enter the "Monitor Reading".

4.73 **IF** SGTR was selected accident type, perform the following:

4.73.1 Select "Not Partitioned" on the "Steam Line Release Pathway Data" pop up screen.

4.73.2 Select "OK".

4.73.3 Enter the "Monitor Reading".

4.73.4 Enter Main Steam Relief Valve flow rates as follows:

4.73.4.1 **IF** initial dose projection is being performed and Main Steam Relief valves lifted during **OR** prior to the time period of the dose projection, enter " $4.5E6$ " in the flow rate column next to "SG-A" and "SG-B".

4.73.4.2 **IF** initial dose projection is being performed and the Main Steam Relief valves were **NOT** lifted during **OR** prior to the time period of the dose projection, enter "0" in the flow rate column next to "SG-A" and "SG-B".

4.73.4.3 **IF** a subsequent (non-initial) dose projection is being performed and the Main Steam Relief valves lifted during the time period of the dose projection, enter " $4.5E6$ " in the flow rate column next to "SG-A" and "SG-B".

4.73.4.4 **IF** a subsequent (non-initial) dose projection is being performed and the Main Steam Relief valves were **NOT** lifted during the time period of the dose projection, enter "0" in the flow rate column next to "SG-A" and "SG-B".

4.74 Select "Accept".

4.75 Select "Emergency Classification"

4.76 Select current emergency classification.

4.77 **IF** General Emergency was selected, select "No" when prompted "Is there Condition 3 Failed Fuel?"

NOTE: **IF** current releases are less than normal operating limits, the box above the "Continue" and "GE PARs" buttons will indicate "Release < Normal Operating Limits" after calculations have been performed.

4.78 Select "Perform Calculations".

4.79 **IF** the following conditions exist, select "GE PARs":

- General Emergency is the current classification.
- It is desired to observe protective action recommendations.

4.80 Select "Continue".

4.81 Select "Go to Report Menu".

4.82 **IF** a printer is available, select "Print Summary Form".

4.83 **IF** a printer is **NOT** available, perform the following:

4.83.1 Select "View Reports" to view "Real Time Mode Summary Report".

4.83.2 Record applicable data on Enclosure 5.2.

4.83.3 Select "done".

4.84 Select "Return to Output Menu".

4.85 Select "Return to Main Menu".

4.86 Select "Perform Forecast".

- 4.87 **IF** General Emergency was selected, select "No" when prompted "Is there Condition 3 Failed Fuel?"
- 4.88 Enter "1" for the forecast period in hours.
- 4.89 Select "OK".
- 4.90 Select "OK" when prompted "Note: Forecast will use the source term and meteorological data from Step (current step number). Continue?"
- 4.91 Select "Continue".
- 4.92 Select "Yes" when prompted "Do you want to save PAZs identified in the forecast mode for identification?"
- 4.93 Select "Go to Report Menu".
- 4.94 **IF** a printer is available, select "Print Green Form".
- 4.95 **IF** a printer is **NOT** available, perform the following:
- 4.95.1 Select "View Reports".
 - 4.95.2 Select "Green Form" from the "tab" located along the bottom of the Forecast report.
 - 4.95.3 Record applicable data on Enclosure 5.3:
 - Refer to Enclosure 5.4 as necessary to assist in the completion of the emergency notification form.
 - 4.95.4 Select "done".
- 4.96 Select "Return to Output Menu".
- 4.97 Select "Return to Main Menu".
- 4.98 When prompted "You just completed a forecast. Remember to check the meteorological and source term data for current information.", select "OK".

- 4.99 Contact the Emergency Coordinator and perform the following:
- 4.99.1 Notify Emergency Coordinator of dose projection results.
 - 4.99.2 **IF BOTH** of the following conditions exist, the General Emergency classification should be recommended to the Emergency Coordinator:
 - General Emergency has **NOT** already been declared

NOTE: Projected dose is dose that has <u>NOT</u> already been received
--

- 1 rem or greater TEDE **OR** 5 rem or greater CDE thyroid dose is projected.
- 4.99.3 Ask if additional dose projections are required.
- 4.100 **IF** additional dose projections are required, **GO TO** Step 4.51.
- 4.101 **IF** additional dose projections are **NOT** required, turn over dose assessment responsibilities to the TSC Dose Assessment Liaison when contacted.
- 4.102 Complete Procedure Process Record sign-off:
- Transfer completed Procedure Process Record, Raddose V sheets and Enclosure 5.1, 5.2 and 5.3 to Radiation Protection Staff personnel.

5. Enclosures

- 5.1 Manual Input Data Collection
- 5.2 Manual Recording of Summary Report
- 5.3 Manual Recording of Emergency Notification Form
- 5.4 Assisting In the Completion Of The Emergency Notification Form
- 5.5 Example Emergency Notification Form (green sheet)

This is an example form. Any other form that assists in collecting necessary data is acceptable.

METEOROLOGICAL DATA COLLECTION

IF Meteorological Data is **NOT** available, input the following default values as required (default data and live data can be mixed):

	10 METER TOWER (Lower Level)	60 METER TOWER (Upper Level)	RIVER TOWER
WIND SPEED	1	1	1
WIND DIRECTION	140	140	140
DELTA TEMP	+ 2.1	NA	NA
TEMPERATURE °C	16	NA	NA
PRECIPITATION	0	NA	NA

Record meteorological data that has been manually input:

	10 METER TOWER (Lower Level)	60 METER TOWER (Upper Level)	RIVER TOWER
WIND SPEED			
WIND DIRECTION			
DELTA TEMP ¹		NA	NA
TEMPERATURE °C		NA	NA
PRECIPITATION		NA	NA

SOURCE TERM DATA COLLECTION

IF data has been manually entered, complete one column for each dose projection. Unit Vent data is collected for all units to account for activity released out of all Unit Vents. "Time" is the release time of the dose projection. RIAs not used for the dose projection can be N/Aed.

RIA	Affected Unit: _____ Time: _____	Affected Unit: _____ Time: _____	Affected Unit: _____ Time: _____
RIA-16 mR/hr			
RIA-17 mR/hr			
Unit 1 Unit Vent flow rate cfm			
Unit 2 Unit Vent flow rate cfm			
Unit 3 Unit Vent flow rate cfm			
1RIA-45 cpm			
2RIA-45 cpm			
3RIA-45 cpm			
1RIA-46 cpm			
2RIA-46 cpm			
3RIA-46 cpm			
1RIA-56 R/hr			
2RIA-56 R/hr			
3RIA-56 R/hr			

Enclosure 5.2

Manual Recording Of Summary Report

HP/0/B/1009/022

Page 1 of 1

1. Use the following steps to record required information:

1.1 Select "Review Summary Report" at report menu.

NOTE: One table should be completed for each dose projection (step number).

1.2 Complete a data table at Step 1.4 based on Summary Report data.

1.3 Determine the Emergency Classification Criteria as follows:

	Unusual Event	Alert	Site area Emergency	General Emergency
TEDE (mrem/hr) at 1 mile	1.14E-1	1.14E+1	100	1000
CDE Thyroid (mrem/hr) at 1 mile	3.42E-1	3.42E+1	500	5000

1.4 Record Summary Report data on the following table(s):

Current Date:	Current Time:
Raddose V Step Number:	Raddose V Operator:
Emergency Classification Based on Dose Rate:	
TEDE (mrem/hr) at 1 mile:	
CDE (Adult) Thyroid (mrem/hr) at 1 mile:	

Current Date:	Current Time:
Raddose V Step Number:	Raddose V Operator:
Emergency Classification Based on Dose Rate:	
TEDE (mrem/hr) at 1 mile:	
CDE (Adult) Thyroid (mrem/hr) at 1 mile:	

Current Date:	Current Time:
Raddose V Step Number:	Raddose V Operator:
Emergency Classification Based on Dose Rate:	
TEDE (mrem/hr) at 1 mile:	
CDE (Adult) Thyroid (mrem/hr) at 1 mile:	

Enclosure 5.3
Manual Recording Of Emergency
Notification Form

HP/0/B/1009/022
Page 1 of 1

This enclosure should be used if printer problems occur and the Emergency Notification Form (green sheet) CANNOT be printed. Use the following steps to record required information, based on radiological conditions:

1. At Report Menu, select DISPLAY GREEN FORM.
2. Copy information from Raddose V to the bottom of this enclosure.
3. Line 11 "Stopped" time = "Started" time + 1 hour.
4. Complete line 15 based on Raddose V results:
 - **IF** no Recommended Protective Actions are displayed, place an "X" in box A below.
 - **IF** dose projections indicate evacuation and sheltering are necessary, Raddose V will display the affected Protective Action Zones (PAZs). Copy this information onto the form below and check boxes B and C, if applicable.
5. Using Enclosure 5.2 or the "Summary Report" record Emergency Classification below.

****11. RELEASE INFORMATION:** ☐ ELEVATED ☒ GROUND LEVEL

☒ AIRBORNE: STARTED: ____:____/____/____ STOPPED: ____:____/____/____
Time Date Time Date

☐ LIQUID: STARTED: ____:____/____/____ STOPPED: ____:____/____/____
Time Date Time Date

****12. RELEASE RATES:** ☒ Curies Per Sec ☐ Curies NORMAL OPERATING LIMITS: ☐ BELOW ☐ ABOVE

☒ NOBLE GASES _____ ☒ IODINES _____

☒ PARTICULATES _____ ☐ OTHER N/A _____

****13. FORECAST OFF-SITE DOSE:** ☒ NEW ☐ UNCHANGED PROJECTION TIME: _____

	TEDE (mrem)	Thyroid CDE (mrem)	
	forecast	forecast	
1 SITE BOUNDARY	_____	_____	ESTIMATED DURATION <u>1</u> HRS
2 MILES	_____	_____	
5 MILES	_____	_____	
10 MILES	_____	_____	

****14. METEOROLOGICAL DATA:** ☒ WIND DIRECTION (from) ____° ☒ SPEED (mph) _____

☒ STABILITY CLASS _____ ☒ PRECIPITATION (type) _____

15

RECOMMENDED PROTECTIVE ACTIONS		Emergency Classification (circle one):
<input type="checkbox"/> A NO RECOMMENDED PROTECTIVE ACTIONS		None Unusual Event Alert
<input type="checkbox"/> B EVACUATE _____		Site Area Emergency General Emergency
<input type="checkbox"/> C SHELTER IN-PLACE _____		
<input type="checkbox"/> D OTHER N/A _____		

Enclosure 5.4
Assisting In The Completion Of The
Emergency Notification Form

HP/0/B/1009/022
Page 1 of 1

Raddose V will print the Emergency Classification, based on Off-Site Dose on Page 3 of the "Summary Report". Circle corresponding Emergency Classification at line 5 on Raddose V printout of the Emergency Notification Form. If no Emergency Classification applies, write "NONE" on line 5 of the Emergency Notification Form. If the Emergency Notification form (green sheet) generated by Raddose V recommends evacuation of any zone, circle "General Emergency" on the Raddose V printout and recommend a General Emergency to the OPERATIONS SHIFT MANAGER (refer to the following note for more information).

- NOTE:**
- Radiological Emergency Classification is based on dose rates at the Site Boundary (1 mile). Under low wind speeds, Raddose V may indicate low (or no) dose rates at 1 mile for a large release of activity. Then, after performing a forecast, evacuation might be recommended by Raddose V. This is expected and is due to the low wind speed conditions.
 - "Protective Action Recommendations" are either NO Protective Actions Necessary, or Evacuate Affected Zones. Whenever one or more zones are recommended for evacuation, sheltering of ALL other zones must be recommended. It is the responsibility of the Operations Shift Manager to determine which, if any zones should be recommended for evacuation.

For conditions when this procedure is used, if a General Emergency is declared, all zones out to 5 miles around the plant (A0, A1, B1, C1, D1, E1, and F1) will be recommended to be evacuated by Operations. Sheltering is recommended for all other zones. Dose Projections are performed primarily to determine if any zones beyond 5 miles should be evacuated.

Example
Emergency Notification Form (Green Sheet)

1. A. ☐ THIS IS A DRILL B. ☒ ACTUAL EMERGENCY ☐ INITIAL ☐ FOLLOW-UP MESSAGE NUMBER _____
2. SITE: Oconee UNIT: 1 REPORTED BY: _____
3. TRANSMITTAL TIME/DATE: : / / CONFIRMATION PHONE NUMBER: _____
(Eastern) mm/dd/yy
4. AUTHENTICATION (If Required): _____
(Number) (Codeword)

5. EMERGENCY CLASSIFICATION: A. ☐ NOTIFICATION OF UNUSUAL EVENT
B. ☐ ALERT C. ☐ SITE AREA EMERGENCY D. ☐ GENERAL EMERGENCY

6. ☒ Emergency Declaration At: ☐ Termination At: TIME/DATE: : / / (If B, go to Item 16)
(Eastern) mm dd yy

7. EMERGENCY DESCRIPTIONS/REMARKS: _____

8. PLANT CONDITION: ☒ IMPROVING ☐ STABLE ☐ DEGRADING

9. REACTOR STATUS: ☒ SHUTDOWN TIME/DATE: : / / ☐ _____ % POWER
(Eastern) mm dd yy

10. EMERGENCY RELEASE(S):

- A. ☐ NONE (Go to Item 14) B. ☐ POTENTIAL (Go to Item 14) C. ☐ IS OCCURRING D. ☐ HAS OCCURRED

- **11. TYPE OF RELEASE: ☐ ELEVATED ☒ GROUND LEVEL

- ☒ AIRBORNE: STARTED: 12:00 09/21/98 STOPPED: _____
Time (Eastern) Date Time (Eastern) Date
☐ LIQUID: STARTED: _____ STOPPED: _____
Time (Eastern) Date Time (Eastern) Date

- **12. RELEASE MAGNITUDE: ☒ Curies Per Sec ☐ Curies NORMAL OPERATING LIMITS: ☐ BELOW ☒ ABOVE

- ☒ NOBLE GASES 2.56E+00 ☐ IODINES 1.81E-01
☐ PARTICULATES 0.05E-03 ☐ OTHER _____

- **13. ESTIMATE OF PROJECTED OFFSITE DOSE: ☐ NEW ☐ UNCHANGED PROJECTION TIME: 12:15

- | | TEDE (mrem) | Thyroid CDE (mrem) | (Eastern) |
|---------------|-----------------|--------------------|--------------------------------------|
| SITE BOUNDARY | <u>1.45E+01</u> | <u>2.48E+02</u> | |
| 2 MILES | <u>2.93E+00</u> | <u>4.97E+01</u> | ESTIMATED DURATION: <u>1.25</u> HRS. |
| 5 MILES | <u>3.93E-01</u> | <u>6.79E+00</u> | |
| 10 MILES | <u>0.00E+00</u> | <u>0.00E+00</u> | |

- **14. METEOROLOGICAL DATA: ☒ WIND DIRECTION (from) 20.0 deg ☐ SPEED (mph) 8.0
☐ STABILITY CLASS B ☐ PRECIPITATION (type) 0.00 in/16 min

15. RECOMMENDED PROTECTIVE ACTIONS:

- A. ☐ NO RECOMMENDED PROTECTIVE ACTIONS
B. ☐ EVACUATE
C. ☐ SHELTER IN-PLACE
D. ☐ OTHER _____

16. APPROVED BY: _____ TIME/DATE: : / /
(Name) (Title) (Eastern) mm dd yy

* If Items 8-14 have not changed, only Items 1-7 and 15-16 are required to be completed

** Information may not be available on initial notification

Enclosure 5.5
Example
Emergency Notification Form (Green Sheet)

HP/0/B/1009/022
Page 2 of 2

09/21/98

12:15

This page is for internal use only. Do not FAX.

The accumulated dose at the site boundary is: **2.9E+0** millirem (TEDE)
since the beginning of the release. **4.96E+1** millirem (CDE Thyroid)

This information is taken from ☒ Raddose-V estimate.

The following list of dose comparisons should be used to assist the News Group and/or the company spokesperson in quantifying the above exposure to the public through news releases.

Comparisons in millirem(s)

Exposure received from a routine X-ray of the arm or leg. (NUREG/BR-0150)	1
Exposure received during a cross-country flight. (NCRP Report No. 94, 1987)	1.5
Exposure from a single diagnostic chest X-ray. (NUREG/BR-0150)	6
Annual dose commitment limit, to any individual member of the public, from the licensed operation of a nuclear power facility. (10CFR20, Appendix B, Table 2)	50
Routine Upper GI series X-ray. (NCRP Report No 100, 1989)	250
Average annual exposure to the U.S. population from all sources including radon. (NCRP Report No. 94, 1987)	360
EPA Protective Action Guide for the public evacuation and/or shelter. (EPA-400)	1000
Annual occupational limit for nuclear power plant workers. (10CFR20.1201(i))	5000

**INFORMATION
ONLY****Duke Power Company
PROCEDURE PROCESS RECORD**(1) ID No. RP/0/B/1000/029Revision No. 8**PREPARATION**(2) Station OCONEE NUCLEAR STATION(3) Procedure Title Fire Brigade Response(4) Prepared By Ray Waterman (Signature) Ray Waterman Date 3-26-03

(5) Requires NSD 228 Applicability Determination?

☐ Yes (New procedure or revision with major changes)☒ No (Revision with minor changes)☐ No (To incorporate previously approved changes)(6) Reviewed By Robert Agla (QR) Date 4/21/03Cross-Disciplinary Review By _____ (QR) NA RET Date 4/21/03

Reactivity Mgmt Review By _____ (QR) NA _____ Date _____

Mgmt Involvement Review By _____ (Ops Supt) NA _____ Date _____

(7) Additional Reviews

Reviewed By _____ Date _____

Reviewed By _____ Date _____

Temporary Approval (if necessary)

By _____ (OSM/QR) Date _____

By _____ (QR) Date _____

(9) Approved By Rocky Brown Date 4/22/03**PERFORMANCE** (Compare with control copy every 14 calendar days while work is being performed.)

(10) Compared with Control Copy _____ Date _____

Compared with Control Copy _____ Date _____

Compared with Control Copy _____ Date _____

(11) Date(s) Performed _____

Work Order Number (WO#) _____

COMPLETION

(12) Procedure Completion Verification:

☐ Unit 0 ☐ Unit 1 ☐ Unit 2 ☐ Unit 3 Procedure performed on what unit?☐ Yes ☐ NA Check lists and/or blanks initialed, signed, dated, or filled in NA, as appropriate?☐ Yes ☐ NA Required enclosures attached?☐ Yes ☐ NA Data sheets attached, completed, dated, and signed?☐ Yes ☐ NA Charts, graphs, etc. attached, dated, identified, and marked?☐ Yes ☐ NA Procedure requirements met?

Verified By _____ Date _____

(13) Procedure Completion Approved _____ Date _____

(14) Remarks (Attach additional pages)

Duke Power Company
Oconee Nuclear Station

Fire Brigade Response

Reference Use

Procedure No.

RP/**0**/B/1000/029

Revision No.

008

Electronic Reference No

OX0091UU

Fire Brigade Response

NOTE: This procedure is an implementing procedure to the Oconee Nuclear Site Emergency Plan and must be forwarded to Emergency Planning within seven (7) working days of approval.

1. Symptoms

- 1.1 Fire, explosions or conditions (smoke, smoldering, burning) associated with a fire have been reported to the Control Room or to the OSC when activated.
- 1.2 This procedure shall provide guidance to shift personnel and Emergency Coordinator for response, actions, and coordination associated with an incident involving real or suspected fires.

2. Immediate Actions

- 2.1 **IF** Fire Brigade response is being considered during routine operations
THEN Go to Enclosure 4.1 (Fire Brigade Response - Routine Operations)
- 2.2 **IF** Fire Brigade response is being considered
AND The OSC/TSC are activated
THEN Go to Enclosure 4.2 (Fire Brigade Response - OSC/TSC Activation).

3. Subsequent Actions

- _____ 3.1 **WHEN** HPSW Pump **NO** longer required perform the following:
 - 3.1.1 Ensure HPSW Pump switch returned to required position per OP/0/A/1104/011 (High Pressure Service Water).
 - 3.1.2 If required reset Mulsifyres per OP/0/A/1104/011 (High Pressure Service Water).
 - 3.1.3 If required close any Fire Hydrant that was opened. {4}
- _____ 3.2 **IF** Fire Brigade equipment or supplies have been used,
THEN Ensure that all equipment is returned to its proper place and consumable supplies are replaced or ordered.

NOTE: Original copies of the Fire Emergency Report can be located in NSD 112, Fire Brigade Organization and Training.

- _____ 3.3 Complete Enclosure 4.3 (Fire Emergency Report).
 - _____ 3.3.1 Forward a copy to the Fire Protection Engineer.
 - _____ 3.3.2 Initiate a PIP if Enclosure 4.3 (Fire Emergency Report) is completed. Include all important information from Enclosure 4.3 (Fire Emergency Report) in PIP.
 - _____ 3.3.3 Forward this procedure to the Emergency Planning Section.
- _____ 3.4 Conduct a post incident critique for events requiring full Fire Brigade activation.

4. Enclosures

- 4.1 Fire Brigade Response - Routine Operations
- 4.2 Fire Brigade Response - OSC/TSC Activation
- 4.3 Fire Emergency Report
- 4.4 Fire Brigade Leader Checklist
- 4.5 Safety Officer's Checklist
- 4.6 References

Enclosure 4.1
Fire Brigade Response - Routine Operations

RP/0/B/1000/029
Page 1 of 10

1. Fire Brigade Response - Routine Operations

- Actions may be followed in any sequence.
- Lines left of procedure steps are used to indicate place in procedure.
- Check marks are acceptable in these blanks.
- Complete the procedure steps that apply to this incident.
- N/A steps not performed.

1.1 Complete the following with information taken from the caller:

Name/Group of person reporting fire/smoke _____

Location of fire/smoke _____

Equipment/components affected by fire/smoke _____

Time _____ Date _____

Are there people in the immediate area who need to be warned or relocated to a safe area?

Are there any injured people? _____

Call back number _____

_____ 1.1.1 **IF** It is obvious that a full Fire Brigade response is needed

THEN Immediately perform steps 1.4.3, 1.4.4 and 1.4.5.

_____ 1.1.2 Upon completion of step 1.4.5, return to step 1.2.

_____ 1.2 Notify OSM and STA.

_____ 1.3 Refer to the Fire Plan for the location reported for fire in Step 1.1

_____ 1.3.1 Request support from an unaffected unit. (Refer to Fire Plan SOG #10 for Fire Brigade equipment locations).

Enclosure 4.1
Fire Brigade Response - Routine Operations

RP/0/B/1000/029
Page 2 of 10

NOTE: The Operations Shift Manager (OSM) or designee may activate a full Fire Brigade response without sending someone to investigate first, if deemed necessary. Possible situations that warrant full response could include:

- Multiple reports from individuals
- Multiple alarms,
- Other system indications
- Any other indicators that the Operations Shift Manager deems significant.

____ 1.4 **IF** Fire is involved or suspected **INSIDE** the protected area

THEN Perform the following:

____ 1.4.1 Send one operator, with a radio, to the fire/smoke location to perform one of the following:

A. Extinguish the fire (if possible) with portable extinguisher (notify Control Room)

OR

B. **IF** Fire Brigade response is required

THEN Notify Control Room immediately.

____ 1.4.2 **IF** Fire Brigade response is **NOT** needed

THEN Perform the following:

A. Direct NEO to

- Search affected area for victims
- Activate MERT if required per RP/0/B/1000/016, Medical Response.
- **IF NO** fire was discovered then exit this procedure.
- If fire was discovered then GO TO Step 1.4.9.

THEN Perform the following:

- A. Direct NEO to:
- Search effected area for victims
 - Evacuate surrounding areas
 - Pre-stage nearby equipment for Fire Brigade
 - Report to Fire Brigade Leader for further instructions

NOTE: The plant page announcement is needed to activate Fire Brigade members from SPOC, RP and Chemistry because they do not carry radios or pagers. {6}

- B. Use plant page to request all Fire Brigade and MERT members to respond to the fire.
1. Include any information, if known, that would be important to Fire Brigade members responding to the incident location. (eg. Hazardous materials, smoke, structural damage, etc.)
 2. Include the statement "All non-Fire Brigade personnel please avoid the _____." (fire location area)

- A. Transmit "Standby for Emergency Message"
- B. Press the "Instant Call" button labeled "Fire Brigade"
- C. Wait for the red "Transmit" light on the radio to turn off
- D. Transmit message including information, if known, that would be important to Fire Brigade members responding to the staging area (e.g. hazardous materials, smoke, structural damage, etc.).

Enclosure 4.1
Fire Brigade Response - Routine Operations

RP/0/B/1000/029
Page 4 of 10

- _____ 1.4.5 Use the Duke Internal Paging System to alert on duty Operations personnel of the activation of the fire brigade. {7}

SHIFT	GROUP PAGER NUMBER
'A' Shift	777-0392
'B' Shift	777-7705
'C' Shift	778-3411
'D' Shift	777-0002
'E' Shift	778-5157

- _____ A. Provide the staging location for the fire brigade if it is known at the time the page is sent.

NOTE: A plant page announcement is needed to ensure evacuation of fire locations.

- _____ 1.4.6 All Non Fire Brigade personnel please evacuate (all levels of) _____ (fire location area). {8}

No one is to enter (any levels of) _____ (fire location area) until further notification.

Example: MSB canteen: Evacuate entire building

1st. floor admin. building: Evacuate entire building

- _____ 1.4.7 Get staging area location from the Fire Brigade Leader then repeat Steps 1.4.3.B, 1.4.4 and 1.4.5.
- _____ 1.4.8 Notify SRO to evaluate the need for staging personnel at the SSF.
- _____ 1.4.9 Establish and maintain communications with Fire Brigade Leader to provide assistance as needed. {3}

A. Available equipment, refer to SOG #10 in the Fire Plan.

B. Critical equipment in vicinity of fire (Fire Plan)

- _____ 1.4.10 **IF** Hazardous materials are involved,
THEN Refer to RP/0/B/1000/017 (Spill Response Procedure)

Enclosure 4.1
Fire Brigade Response - Routine Operations

RP/0/B/1000/029
Page 5 of 10

_____ 1.4.11 **IF** An oil filled transformer is involved in a fire.

THEN Request Oconee County Fire Department to dispatch the Keowee Key Fire Department to the site.

Dial 9-911	from Ext 3271	Operations Shift Manger's phone
Dial 9-9-11	from Ext. 2159	Unit 1 Control Room SRO's phone or
Dial 911	from 882-7076	Units 1,2, & 3 Control Room, Bell South lines

NOTE: Minimum flow concerns for HPSW pumps can develop if an HPSW pump is operating with discharge flow <1450 gpm. Most deluge/mulsifyre systems satisfy this requirement therefore, 1.4.12.A may not be necessary if large quantities of water are being discharged from the HPSW system.

_____ 1.4.12 **IF** The Fire Brigade identifies a fire requiring application of water for extinguishment,

AND Power is available to operate HPSW pumps {5}

THEN perform the following:

NOTE: These steps are in order of preference.

A. Perform one of the following:

1. Activate Mulsifyre Transformer No. 3Y [3Y Currently spare] (T-3-B42)

OR

2. Activate any one of the following (preferably not loaded or energized):

- Mulsifyre Transformer CT-1 (T-3-B14)
- Mulsifyre Transformer No.CT-2 (T-3-D29)
- Mulsifyre Transformer No.CT-3. (T-3-B42)

OR

3. Remove cap and open any fire Hydrant within protected area or switchyard with a 2.5" outlet.

NOTE: HPSW Pump should be started \leq 30 minutes from start of fire.

B. Start HPSW Pump per OP/0/A/1104/011 (High Pressure Service Water).
 {1} {4}

C. Make a PA announcement to discontinue use of HPSW for non-essential purposes. {1}

D. Evaluate any Auxiliary Building Flooding Concerns (Refer to Auxiliary Building Flood AP). {2}

Dial 9-911	from Ext 3271	Operations Shift Manger's phone
Dial 9-9-11	from Ext. 2159	Unit 1 Control Room SRO's phone or
Dial 911	from 882-7076	Units 1,2, & 3 Control Rooms, Bell South lines

RP/0/B/1000/029
Page 7 of 10

- 1.4.15 IF Fire is isolated on a building roof or other elevated structure, {5}

- A. Request a response from the Keowee Key Fire Department and the county ladder truck.
- B. Instruct the fire department dispatcher to have departments enter the site through the complex entrance off Hwy. 183.
- C. Call Security (ext. 2222) and request that they have a Security officer escort the fire department to the fire location.

- NOTE:**
- Offsite fire departments are normally responsible for fire suppression activities outside the Protected Area. The Fire Brigade may provide limited support for a fire outside the Protected Area if resources allow.
 - The Fire Plan for Keowee Hydro calls for sending the Fire Brigade to extinguish fires there.
 - Security will automatically send a Security Officer to investigate alarms on fire detection systems that are monitored by Security in the PAP. Security will call the emergency line to report the existence of a fire or a need for further investigation by plant personnel as needed.

_____ 1.5 **IF** Fire is involved or suspected **OUTSIDE** the Protected Area,

THEN Call Security (ext. 2222) and request that a Security Officer be dispatched to the suspected fire location to verify fire location and nature of the fire.

 Request Security Shift Supervisor to relay information back to the Control Room via the emergency line (4911).

_____ 1.5.1 **IF** Security confirms that there is a fire or the situation has the potential for developing into one,

THEN Send a Fire Brigade Leader and one Fire Brigade Member or the full Fire Brigade if resources allow. Consider requesting assistance from the offsite fire departments at this time. {6}

IF offsite assistance is needed

GO TO Step 1.5.3.

NOTE:

- This Step does **NOT** apply for the Keowee Hydro Station, which has its own fire pump.
- Minimum flow concerns for HPSW pumps can develop if a HPSW pump is operating with discharge flow <1450 gpm. Most deluge/mulsifyer systems satisfy this requirement therefore, 1.5.2.A may not be necessary if large quantities of water are being discharged from the HPSW system..

_____ 1.5.2 **IF** The Fire Brigade identifies a fire requiring application of water for extinguishment

AND Power is available to operate HPSW pumps {5}

THEN Perform the following:

NOTE: These steps are in order of preference.

A. Perform one of the following:

1. Activate Mulsifyre Transformer No. 3Y [3Y Currently spare] (T-3-B42)
 OR
2. Activate any one of the following (preferably not loaded or energized):
 - Mulsifyre Transformer CT-1 (T-3-B14)
 - Mulsifyre Transformer No.CT-2 (T-3-D29)
 - Mulsifyre Transformer No.CT-3. (T-3-B42)
- OR**
3. Remove cap and open any fire Hydrant within protected area or switchyard with a 2.5" outlet.

NOTE: HPSW Pump should be started ≤ 30 minutes from start of fire.

- B. Start HPSW Pump per OP/0/A/1104/011 (High Pressure Service Water). {1}
 {4}
- C. Make a PA announcement to discontinue use of HPSW for non-essential purposes. {1}

Enclosure 4.1
Fire Brigade Response - Routine Operations

RP/0/B/1000/029
Page 10 of 10

NOTE: All site phones except for the following are blocked from accessing the public 911 emergency service line.

_____ 1.5.3 **IF** Oconee County Fire Department assistance is needed,

THEN Dial 9-911 from Ext. 3271 Operations Shift Manager's phone

Dial 9-911 from Ext. 2159 Unit 1 Control Room SRO's phone

Dial 911 from 882-7076 or

Units 1/2 and 3 Control Rooms, Bell South line

_____ 1.5.4 Request a response from:

- Keowee Key Fire Department
- Keowee Ebenezer Fire Department
- Corinth-Shiloh Fire Department

A. Instruct the fire department dispatcher to have departments enter the site through the complex entrance off Hwy 183.

B. Call Security (ext. 2222) and request that they have a Security Officer escort the fire department to the fire location.

NOTE: Keowee Hydro Station is located in Pickens County. Dialing 9-911 will **NOT** access the Pickens County Fire Dispatch.

_____ 1.5.5 **IF** Six Mile Fire Department assistance is needed for a fire at Keowee Hydro Station,

THEN Call the Pickens County Sheriffs Department (898-5500) and request the response of Six Mile Fire Department to Keowee Hydro Station.

- Call Security (ext. 2222) and request that they have a Security Officer escort the fire department to the fire location.

_____ 1.6 Return to Section 3, Subsequent Actions.

1. Fire Brigade Response – OSC/TSC Activation

- Actions may be followed in any sequence.
- Lines left of procedure steps are used to indicate place in procedure.
- Check marks are acceptable in these blanks.
- Complete the procedure steps that apply to this incident.
- N/A steps not performed.

_____ 1.1 Complete the following with information taken from the Work Control Assistant who received the emergency line call:

Name/Group of person reporting fire/smoke _____

Location of fire/smoke _____

Equipment/components affected by fire/smoke _____

Time _____ Date _____

Are there people in the immediate area who need to be warned or relocated to a safe area?

Are there any injured people? _____

Call back number _____

_____ 1.2 Refer to Fire Plan for the location reported for fire in Step 1.1.

_____ 1.2.1 Request support from an unaffected unit. (Refer to Fire Plan SOG#10 for Fire Brigade Equipment locations).

NOTE: The Emergency Coordinator or designee may activate a full Fire Brigade response without sending someone to investigate first, if deemed necessary. Possible situations that warrant full response could include:

- Multiple reports from individuals
- Multiple alarms,
- Other system indications
- Any other indicators that the Emergency Coordinator deems significant.

_____ 1.3 **IF** Fire is involved or suspected **INSIDE** the Protected Area,

THEN Perform one of the following as required.

_____ 1.3.1 Send one operator, with a radio, to the fire/smoke location to perform one of the following:

A. Extinguish the fire (if possible) with portable extinguisher (notify Control Room)

OR

B. **IF** Fire Brigade response is required

THEN Notify OSC SRO immediately.

_____ 1.3.2 **IF** Fire Brigade response is **NOT** needed,

THEN Perform the following:

A. Direct NEO to search affected area for victims

B. Activate MERT if required per RP /0/B/1000/016 (Medical Response)

C. **IF NO** fire was discovered then exit this procedure.

D. If fire was discovered then GO TO Step 1.3.5.

Enclosure 4.2
Fire Brigade Response - OSC/TSC Activation

RP/0/B/1000/029
Page 3 of 8

- _____ 1.3.3 **IF** A full Fire Brigade response is needed,

 THEN Perform the following:
- A. Direct NEO to:
- Search effected area for victims
 - Evacuate surrounding areas
 - Pre-stage nearby equipment for Fire Brigade
 - Report to Fire Brigade Leader for further instructions
- B. Dispatch Fire Brigade Members assigned to the OSC.
- C. Request the OSC Security Manager to have MERT respond along with the Fire Brigade to the fire location.
- _____ 1.3.4 Establish and maintain communications with Fire Brigade Leader to provide assistance as needed. {3}
- A. Available equipment (Refer to SOG #10 in the Fire Plan)
- B. Critical equipment in vicinity of fire (Fire Plan)
- _____ 1.3.5 **IF** Hazardous materials are involved,

 THEN Refer to RP/0/B/1000/017 (Spill Response Procedure).
- _____ 1.3.6 **IF** An oil filled transformer is involved in a fire,

 THEN Request Oconee County Fire Department to dispatch the Keowee Key Fire Department to the site.
- | | | |
|------------|----------------|--|
| Dial 9-911 | from Ext. 3271 | Operations Shift Manager's phone |
| Dial 9-911 | from Ext. 2159 | Unit 1 Control Room SRO's phone or |
| Dial 911 | from 882-7076 | Units 1, 2 and 3 Control Rooms, Bell South lines |
- A. Instruct the fire department dispatcher to have Keowee Key enter the site through the complex entrance off Hw 183.

1.3.7 **IF** The Fire Brigade identifies a fire requiring application of water for extinguishment,

AND Power is available to operate HPSW pumps {5}

THEN Perform the following

D. Evaluate any Auxiliary Building Flooding Concerns (Refer to Auxiliary Building Flood AP). {2}

Enclosure 4.2
Fire Brigade Response - OSC/TSC Activation

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____ 1.3.8 Notify SRO to evaluate the need for staging personnel at the SSF.

____ 1.3.9 **IF** Fire occurs on backshifts or weekends
AND Additional Fire Brigade support is needed,
THEN Perform the following:

A. Select the off duty shift(s) that will impact the safe operation of the plant the least by being recalled (i.e., shifts other than on coming shift).

____ A ____ B ____ C ____ D ____ E

B. Call the Switchboard Operator and request them to recall the shift(s) selected in Step A.

C. Use the Duke Internal Paging System to alert the off duty shift selected in Step A to respond back to the site for fire brigade duties. {7}

SHIFT	GROUP PAGER NUMBER
'A' Shift	777-0392
'B' Shift	777-7705
'C' Shift	778-3411
'D' Shift	777-0002
'E' Shift	778-5157

____ 1.3.10 **IF** Oconee County Fire Department assistance is needed for additional manpower, equipment or the fire lasts longer than 5 minutes after the application of extinguishing agent. {6}

THEN Request that the Offsite Communicator call and request a fire department response from:

- Keowee Key Fire Department
- Keowee-Ebenezer Fire Department
- Corinth Shiloh Fire Department

A. Have the Offsite Communicator instruct the fire department dispatcher to have the responding departments to enter the site through the complex entrance off Hwy 183.

B. Request that a Security officer meet and escort the fire department to the fire location.

Enclosure 4.2
Fire Brigade Response - OSC/TSC Activation

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1.3.11 **IF** Fire is located on a building roof or other elevated structure, {5}

THEN Request the Offsite Communicator call and request a response from the Keowee Key Fire Dept. and the county ladder truck.

- A. Have the Offsite Communicator instruct the fire department dispatcher to have the responding units to enter the site through the complex entrance off Hwy 183.
- B. Request that a Security officer meet and escort the fire department to the fire location.

NOTE:

- Offsite fire departments are normally responsible for fire suppression activities outside the Protected Area. The Fire Brigade may provide limited support for a fire outside the Protected Area if resources allow.
- The Fire Plan for Keowee Hydro calls for sending the Fire Brigade to extinguish fires there.
- Security will automatically send a Security Officer to investigate alarms on fire detection systems that are monitored by Security in the PAP. Security will call the emergency line to report the existence of a fire or a need for further investigation by plant personnel as needed.

____ 1.4 **IF** Fire is involved or suspected **OUTSIDE** the Protected Area,

THEN Request that a Security Officer be dispatched to the suspected fire location to verify the location and status of the fire. Request that information be relayed back to the OSC via the emergency line (4911).

____ 1.4.1 **IF** Security confirms that there is a fire or the situation has the potential for developing into one,

THEN Send a Fire Brigade Leader and one Fire Brigade Member or the full Fire Brigade if resources allow. Consider requesting assistance from the offsite fire departments at this time. {6}

IF Offsite assistance is needed

GO TO Step 1.4.3

Enclosure 4.2
Fire Brigade Response - OSC/TSC Activation

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NOTE:

- This step does **NOT** apply for the Keowee Hydro Station, which has its own fire pump.
- Minimum flow concerns of HPSW pumps can develop if a HPSW pump is operating with discharge flow <1450 gpm. Most deluge/mulsifyer systems satisfy this requirement therefore, 1.4.2.A may not be necessary if large quantities of water are being discharged from the HPSW system.

_____ 1.4.2 **IF** The Fire Brigade identifies a fire requiring application of water for extinguishment,

AND Power is available to operate HPSW pumps. {5}

THEN Perform the following:

NOTE: These steps are in order of preference.

- A. Perform one of the following:
1. Activate Mulsifyre Transformer No. 3Y [3Y Currently spare] (T-3-B42)
 OR
 2. Activate any one of the following (preferably not loaded or energized):
 - Mulsifyre Transformer CT-1 (T-3-B14)
 - Mulsifyre Transformer No.CT-2 (T-3-D29)
 - Mulsifyre Transformer No.CT-3. (T-3-B42)
 - OR**
 3. Remove cap and open any fire Hydrant within protected area or switchyard with a 2.5"outlet.

NOTE: HPSW Pump should be started \leq 30 minutes from start of fire.

- B. Start HPSW Pump per OP/0/A/1104/011 (High Pressure Service Water).
 {1} {4}
- C. Make a PA announcement to discontinue use of HPSW for non-essential purposes. {1}

Enclosure 4.2
Fire Brigade Response - OSC/TSC Activation

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- _____ 1.4.3 **IF** Oconee County Fire Department assistance is needed,
- THEN** Request that the Offsite Communicator call and request a fire department response from:
- Keowee Key Fire Department
 - Keowee-Ebenezer Fire Department
 - Corinth Shiloh Fire Department
- A. Have the Offsite Communicator instruct the fire department dispatcher to have the responding units to enter the site through the complex entrance off Hwy 183.
- B. Request that a Security Officer meet and escort the fire department to the fire location.

NOTE: Keowee Hydro Station is located in Pickens County.

- _____ 1.4.4 **IF** Six Mile Fire Department assistance is needed for a fire at Keowee Hydro Station,
- THEN** Request the Offsite Communicator call the Pickens County Sheriffs Department (898-5500) and request Six Mile Fire Department to respond to Keowee Hydro Station.
- Request that a Security Officer meet and escort the fire department to the fire location.

_____ 1.5 Return to Section 3, Subsequent Actions.

Enclosure 4.3
Fire Emergency Report
FIRE EMERGENCY REPORT

Rp/0/B/1000/029
Page 1 of 1

Station/Location: _____ Date: _____

Location (Unit/Area): _____

Time Discovered: _____ Discovered By: _____

Operations Shift Manager: _____

Evacuation: Yes _____ No _____ Partial _____ Other _____

Fire Brigade Response: Yes _____ No _____

Time Fire Extinguished: _____

List All Fire Protection Equipment Used _____

Operation Satisfactory: Yes _____ No _____ (Use Back For Details)

Equipment Restored For Use: Yes _____ No _____ If no, Explain (Use Back for Details)

Outside Assistance Called: No _____ Yes _____ Agency(s) _____

Area Involved: _____

Point of Origin (If known): _____

Cause (If known) _____

Damage To:
Building _____
Equipment _____
Personal _____
Other _____

Injuries Reported: _____

Briefly Describe What Happened: _____

*Signature of Fire Brigade Leader

*Signature of Operations Shift Manager

*Notify Safety Representative of Fires Involving Personal Injury (Refer to Duty List for after hours).

Enclosure 4.4
Fire Brigade Leader Checklist

RP/0/B/1000/029
Page 1 of 1

TASK	✓
Don Fire Brigade Leader Vest	
Determine Staging Area and Communicate to Control Room <ul style="list-style-type: none">• Safe accessibility• Minimal distractions• Appropriate vicinity	
Establish The Following Teams/Priorities: <ul style="list-style-type: none">• Entry Team - Priority = search & rescue/fight fire• Backup Team - Priority = backup Entry Team/help fight fire• Rapid Intervention Team - Priority = Rescue Fire Fighters (if required)	
Stress The Following Items With All Teams Prior To Dispatching To Fire: <ul style="list-style-type: none">• Safety of Team is top priority• Stay with the hose/rescue line <u>at all times</u>• Maintain contact with your team at all times• All teams report to Safety Officer prior to entering fire zone and after exiting fire zone for accountability	
Assess The Fire: <ul style="list-style-type: none">• Request CR to dispatch additional resources as required:<ul style="list-style-type: none">- Off Duty Shifts and/or Offsite Fire Departments -- (Fire active > 5 minutes after extinguishing agent is applied)- Outside Equipment Truck and/or Equipment Carts- CO2 or Wheeled Dry Chemical Extinguishers- Foam Units• Exposures - Critical Equipment Concerns<ul style="list-style-type: none">- Above/Below Fire?, Fire/Smoke/Water?, Electrical Hazards?• Report Critical Equipment Concerns to CR for Emergency Plan Consideration	
Request Location of Nearest Fire Hose Locations From Control Room: <ul style="list-style-type: none">• Elevation/column #• Communicate locations to teams	
Request Assistance From RP/Security <ul style="list-style-type: none">• Request Security At The Scene To Control Access To The Area• If Radiological Concerns Exist, Request CR To Notify RP	
Refer To Fire Plan As Required: <ul style="list-style-type: none">• Hazards/Ventilation• Refer To SOG #10 for Fire Brigade equipment locations	
If Hazardous Materials Involved, Request CR to Dispatch Haz-Mat Team	

Enclosure 4.5
Safety Officer's Checklist

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TASK	✓
Don Safety Officer Vest	
Establish Accountability For FB Members <ul style="list-style-type: none">• Name tags/accountability board	
Perform PPE Checks of Fire Fighters <ul style="list-style-type: none">• All skin covered• All turnout gear openings closed• SCBA cylinder full (\geq 4000 psi)• SCBA cylinder valves fully open• PASS device operational	
Log Team Assignments on Accountability Board <ul style="list-style-type: none">• Log time on air• Log entry times• Log team assignments	
Assign MERT Responsibilities <ul style="list-style-type: none">• Stand by with medical equipment• Monitor FB members for signs of heat exhaustion/stress/etc.• Provide drinking water for fire fighters	
Maintain Continuous Contact With Fire Brigade Leader	
Evaluate SCBA Needs <ul style="list-style-type: none">• If required, request CR to have SCBA cylinder fill trailer delivered• If required, request CR to have Spare SCBA cylinders delivered.• If required, request CR to have spare SCBAs (for additional responders) delivered	

1. References:

- {1} PIP 01-0405
- {2} PIP 99-1286
- {3} PIP 01-1220
- {4} PIP 02-03870
- {5} PIP 02-03489
- {6} PIP 02-07174
- {7} PIP 03-00251
- {8} PIP 03-01359

INFORMATION ONLY



SITE SERVICES GROUP (SSG) DIRECTIVE MANUAL

Functional Area Directive: 102. SSG Emergency Response Plan (ONS Specific)

Revision Number

0

1

Issue Date

03/15/01

04/30/03

CATAWBA

Approved by/Date:

D.M. Huffstetler/xx/xx/xx

Site Services Manager

Effective Date

N/A

MCGUIRE

Approved by/Date:

M.W. Murdock/xx/xx/xx

Site Services Manager

Effective Date

N/A

OCONEE


Approved by/Date:

T.L. Crouse/04/23/03

Site Services Manager

Effective Date

04/30/03Issued by: N/A

ADDITIONAL SIGN-OFF/APPROVAL	
<div>DUKE POWER</div> <div>SITE SERVICES GROUP DIRECTIVE MANUAL</div>	
Functional Area Directive: 102 SSG Emergency Response Plan (ONS Specific)	
<u>REVISION NUMBER</u>	<u>ISSUE DATE</u>
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SSG Appendix C. 100 Training Summary Form (Form SSG100B)

Training Summary Sheet							
Directive No.	<u>SSG-102 Rev.0</u>		Title	<u>SSG Emergency Response Plan</u>			
Training Level:	<u>Familiarization</u>						
Target Groups:	<u> x </u>	<u> x </u>	<u> </u>	<u> </u>	<u> x </u>	<u> x </u>	<u> x </u>
	Fac	Equip	Tools	Dist	Tech Supp	EP	Adm

This training summary is intended as an aid when training on new or revised directives, and should be placed in front of the referenced directive.

Training Summary Objectives/Changes:

Targeted Groups: Please review changes to Appendix B.

NOTE: THIS DIRECTIVE MUST BE PROVIDED TO ONS EMERGENCY PLANNING GROUP WITHIN THREE (3) DAYS OF ISSUE.

Approved By: T L Crouse Date: 04/23/03

SSG 102 Document Revision Description:

<u>REVISION NO.</u>	<u>PAGES or SECTIONS REVISED AND DESCRIPTION</u>
0	Initial issue (Effective Date 03/01/01)
1	Deleted the following item on Appendix B, EOF Shutdown Checklist under Administration - "Make 2 copies of EOF Director's Logbook, and give to the Emergency Planner". Moved "Verify public address system is off" under "Facilities" on same form.

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This directive is part of the Oconee Nuclear Site Emergency Plan Implementing procedure. Upon approval/effective date of revisions to this directive, a controlled copy of this directive must be sent to Emergency Planning within (3) working days upon receipt of document transmittal.

102.1 PURPOSE

The purpose of this directive is to provide guidelines for Emergency Response accountability and support during a drill or event at Oconee Nuclear Station. This includes any support needs prescribed by the Technical Support Center (TSC), the Operations Support Center (OSC), and the Emergency Operations Facility (EOF).

102.2 SCOPE

This directive applies to all Oconee Nuclear Station personnel designated to report through the EOF Site Services Group Manager or the Nuclear Supply Chain (NSC) OSC Liaison during a site drill or event. (Contractors, Vendors, and Visitors are included).

102.3 DEFINITIONS

- Accounting Individual - Individual designated by SSG Management to report a team's accountability during a site assembly and to assist in the relocation/evacuation of team.
- Emergency Operations Facility (EOF) - Alternate operational facility for Emergency personnel to perform Plant Operation functions, Support functions, and Communication functions. (Located on Issaqueena Trail in Clemson across from the Operations Center.)
- EOF Site Services Group Manager - reports to the EOF and coordinates request for the support teams reporting through NSC from the OSC or EOF Director.
- Emergency Response Organization (ERO) - A computerized list of Duke Power personnel trained to support the Oconee Nuclear Station during a drill or event. This list is maintained by the station Emergency Planning group to facilitate entry to the station or EOF.
- Operations Support Center (OSC) - Located outside the Unit 3 Operation Center (OPS) and designated for specially trained personnel to assemble for the support of the station during a drill or event.
- OSC Nuclear Supply Chain (NSC) Liaison – An NSC staff member (NSC Duty Person) reporting to the OSC to coordinate communication and requests between the OSC Manager and the various support groups reporting through SSG.
- OSC Coordinator - Individual designated by Nuclear Site Management to coordinate information from the TSC and direct operations at the OSC.
- Shift Personnel - Personnel designated by SSG Management for 24-hour coverage of the station tool rooms. (Report to SPOC - 3135 or 3101 during site assembly on backshift, weekends, or holidays.)
- Site Assembly - The method used to account for personnel during a drill or event.

- Site Evacuation - The evacuation of personnel from the site to an off-site location at the completion of a Site Assembly.
- Site Relocation - The relocation of personnel to an alternate location on-site during a Site Assembly.

102.4 REFERENCES

- Duke Power Company Oconee Nuclear Station Site Emergency Plan
- Oconee Response Procedure RP/O/B/1000/10 and RP/O/B/1000/22 and RP/O/B/1000/25
- NSD 114, Site Assembly/Evacuation

102.5 RESPONSIBILITIES

102.5.1 SITE SERVICES GROUP MANAGER

- a) Ensure site assembly accountability of personnel reporting through SSG is complete within 20 minutes.
- b) Ensure Category Classifications are assigned, identifying all SSG personnel as essential/non-essential. (Refer to Procedure RP/O/B/1000/10 for more information)
- c) Ensure Site Assembly locations are designated for SSG personnel.
- d) Ensure SSG organization is staffed to meet emergency response requirements.
- e) Ensure that an effective program exists to assemble workforce in a timely manner.
- f) Ensure that an effective program exists to stock and provide emergency materials/equipment in a timely manner.
- g) Ensure an effective program exists to maintain emergency stock inventory identified in Appendix G.

102.5.2 SITE SERVICES GROUP STAFF

- a) Ensure individuals are knowledgeable of this directive and NSD 114.
- b) Ensure personnel reporting to you are accounted for within 10 minutes during a site assembly. (Includes vendors, contractors, and visitors.)
- c) Ensure personnel reporting to you maintain training and experience levels to meet emergency response requirements.
- d) Ensure contact with SSG Emergency Evacuation /Relocation Coordinator is established and maintained until site assembly or evacuation is completed.

102.5.3 SITE SERVICES GROUP PERSONNEL

(Includes vendors, contractors, and any other personnel reporting through SSG)

- a) Report immediately to accounting individual during a site assembly and follow any instructions provided in the case of evacuation/relocation in a timely/orderly manner.
- b) Be familiar with your designated site assembly location.
- c) Designated Emergency Response personnel report to assigned location after reporting to your accounting individual and, if inside Protected Area, after swiping "EP Reader" nearest your assembly points location.
- d) Maintain training and experience levels to meet Emergency Response requirements. (Includes PAT and RWT training)

102.5.4 SSG EVACUATION/RELOCATION COORDINATOR

- a) Maintain and communicate the SSG Evacuation/Relocation plan per Evacuation Plan Icon on DAE. The plan includes plant status, personnel to be evacuated, and evacuation instructions. Refer to RP/O/B/1000/10 for emergency evacuation and relocation instructions if computer system is inoperable.
- b) Coordinate communication with the OSC NSC Liaison, the EOF SSG Manager and the accounting individuals to:
 - 1. Assure personnel needed for support have been determined and notified.
 - 2. Verify personnel are aware of which evacuation/relocation plan is in effect.
 - 3. Coordinate transportation efforts for evacuation.
 - 4. Report evacuation/relocation status (OSC - 885-3085 or EOF - 624-4392).

102.5.5 SSG EMERGENCY RESPONSE COORDINATOR

- a) Attend station Emergency Response drill scenario meetings and help develop drill scenarios involving SSG support personnel.
- b) Maintain Directive SSG-102, SSG Emergency Response Plan. Provide Site Emergency Planning with a copy of directive revisions within three working days of directive approval.
- c) Maintain OSC NSC Liaison and EOF SSG Manager duty schedules.
- d) Maintain SSG ERO list of designated personnel to be contacted during a drill or event. (Includes quarterly verification of names and phone numbers.)

102.5.6 SSG EMERGENCY RESPONSE TEAMS

- a) Notify the SSG Emergency Response Coordinator of any changes, deletions, or additions to the ERO list. (Includes name, phone number, ERO responsibility)
- b) Report quickly and safely to ERO area of responsibility when notified of a drill or event. (Report to accounting individual first if during normal working hours and, if inside Protected Area, after swiping "EP Reader" nearest your assembly points location.
- c) Maintain Fitness for Duty (FFD) when scheduled for ERO duty.
- d) Use repeat back method for verification of instructions.
- e) Answer all telephone calls with name and location while in a drill or event.

102.5.7 SSG FACILITIES AND EQUIPMENT MANAGER

- a) Ensure Site Emergency Equipment listed on Appendix F, or equivalent is kept on site in operating condition.
- b) Ensure Emergency Response Equipment listed in Appendix G, or equivalent, can be located and on-site within (4) hours of notification of emergency need.

102.6 DIRECTIONS

NOTE: When SSG support is necessary during a drill or event, the NSC OSC Coordinator, Shift Supervisor, or designee will contact the SSG ERO personnel by:

- 1. Site paging system to activate the OSC and EOF
- 2. Duty beeper will carry Blue Delta or Blue Echo message
- 3. Telephone call-out on the CAN system, use 1,2,3,4 code to respond.

102.6.1 NUCLEAR SUPPLY CHAIN (NSC) OSC LIAISON

- a) Be available to respond to a drill or event notification as soon as possible when on duty.
- b) Carry the duty beeper and maintain the OSC Duty Manual, cellular phone and brief case at all times. The OSC duty person is responsible for the security of these items.
- c) Notify the NSC Administrative Specialist responsible for the NSC Duty Roster and the SSG ER Coordinator before making any changes to the duty roster.
- d) Report to the OSC when notified of a drill or event, sign in, and function as the NSC Coordinator for the OSC. This responsibility includes supervising the OSC shift personnel and, if needed, relaying information to the SSG Commissary team member(s) on site.
- e) After reporting to the OSC, complete the check-off list. (Refer to Ocone Response Procedure RP/O/B/1000/25)
- f) Establish and maintain communication with SSG Evacuation/Relocation Coordinator until site assembly or evacuation is complete.

102.6.2 EOF SITE SERVICES GROUP MANAGER

- a) Be available to respond to a drill or event notification as soon as possible when on duty.
- b) Carry the duty beeper and maintain the EOF duty manual and briefcase at all times. It is the responsibility of the EOF duty person to ensure security of these items. Duty person must call in during ERO test on Tuesdays.
- c) Notify the SSG Administrative Specialist responsible for the SSG Duty Roster and the SSG ER Coordinator before making any changes to the duty roster.

- d) Report to the EOF when notified of a drill or event, sign in, and function as the SSG Manager for the EOF. This responsibility includes providing coordination between the OSC NSC Liaison and the SSG Emergency Response Organization (ERO).
- e) After reporting to the EOF, complete the EOF Manager Activation checklist. (Refer to Appendix A)
- f) Establish and maintain communication with the SSG Evacuation/Relocation Coordinator until site assembly or evacuation is complete.
- g) At completion of an emergency event, ensure appropriate groups complete the EOF Shutdown checklist. (Refer to Appendix B)

102.6.3 ADMINISTRATION TEAM

The Administration Director and Team(s) provide general administrative office support to the various EOF teams as needed.

- **Major functions**

- a) Provide office supplies and equipment in the SSG room
- b) Provide office assistant services
- c) Provide copy services
- d) Determine hotel/motel accommodations and travel requirements; contact Corporate Travel Center for securing these requirements.

- **Upon arrival at the EOF**

The Administration Director will be responsible for the following:

- a) Complete the Administration Staff checklist. (Appendix C)
- b) The Administration Team will maintain EOF SSG team files as follows:
 - 1. Correspondence - Incoming and Outgoing
 - 2. Log of activities

102.6.4 FACILITIES TEAM

The Facilities Team provides first line support of all facility, electrical, and communications needs at the EOF and the overall recovery organization during an event/drill.

- **Major Functions**

- a) Secure facility in case of any damage and make necessary repairs as needed to maintain integrity of building.
- b) Supply two-way radios and radio pagers as needed.
- c) Install additional electrical hookups as needed.
- d) Report all telecommunications problems to SPOC helpline (8-382-7762).

- **Upon arrival at the EOF**

- a) After reporting to the EOF, complete the Facilities Staff Checklist. (Refer to Appendix I).

- **Telephone**

Phone equipment for the Oconee EOF is located in each individual room and location. The press lines phones and related equipment are stored in the EOF Audio/Visual room.

102.6.5 NUCLEAR SUPPLY CHAIN (NSC) PROCUREMENT TEAM

The NSC Procurement Team coordinates all activities with the recovery Organization relating to the procurement of materials, equipment and services during an event/drill.

- **Major functions**

- a) Issue requisitions and purchase orders
- b) Negotiate contracts
- c) Expedite hardware and software
- d) Coordinate receipt and distribution of material and equipment.

NOTE: The EOF Director and the EOF SSG Manager are authorized to approve expenses incurred in the performance of duties.

- **Additional Personnel Required**

The procurement function will be handled by the General Office or NSC Procurement Group. The General Office will staff backup teams per the PD's instructions. Clerical support will be provided as needed by the EOF Administration Director.

- **Field Commodity Contacts**

Commodities contact can be called to assist in the requisitioning of materials during a Drill/Event. (See the Nuclear Supply Chain (NSC) ERO Teams, telephone numbers, and vendors' list in the C&F file cabinet for names).

- **Interface with Other Groups**

The NSC Procurement Director will work with the Distribution/Equipment Team to ensure expeditious delivery of equipment. The PD will work with the EOF SSG Manager and the Nuclear Generation Department to expedite the receipt and distribution of equipment and materials. The NSC Procurement Director will work with the Human Resources Team to assist in providing support personnel and labor relations assistance as required.

- **Crisis Stage to Recovery Stage**

The following is a checklist of things to do and/or consider when moving from the CRISIS STAGE to the RECOVERY STAGE of an event.

- a) Activate purchasing backup team and prepare shift schedule.
- b) Assess need for additional personnel support
- c) Assess need to activate field commodity contacts.
- d) Establish expediting priority code (3).

- **Procedures**

Requisitioning Equipment:

- a) When materials, equipment, and /or services are needed, the PD at the EOF will convey the need to the purchasing department via telephones, computers, and

telecopiers. Recovery effort requisitions will be processed through the purchasing system for immediate handling.

Expediting:

- a) Expediting priority code (3) will apply to all purchases for the recovery operation unless determined otherwise.

Receiving:

- a) The ONS Nuclear Supply Chain (NSC) Receiving Department will handle receipt of material and equipment. A member of the EOF purchasing team will coordinate with receiving personnel to assure the material gets to the appropriate destination at the site.

102.6.6 COMMISSARY TEAM

The commissary team provides basic nutritional and personal needs for the recovery organization during a drill or event at the OSC, TSC, and EOF.

Arrival at the EOF

- a) The Commissary Director/designee (CD) will contact the food services as necessary to meet the needs of the situation and location.

- **Food Service**

- a) Vendors on the Site Services Group ERO Teams, telephone numbers, and vendors list have agreed to supply coffee and pastries for pickup or delivery within one hour, and regular meals (catered for up to 300 persons) within three (3) hours.

- **Recovery**

During the recovery stage, the following duties should be performed to ensure proper support for all EOF personnel involved.

- a) Notify food suppliers
 - b) Establish daily schedule
 - 1. Meals - location, time and notification to all areas involved.
 - c) If required, notify tent, furniture, and portable toilet suppliers.
 - d) Establish personnel requirements, if required.
 - e) Remove trash as necessary (when, how often, where).
 - f) Establish schedule for personnel - Ensure around the clock coverage in all areas listed. Provide a copy to the SSG EOF Manager.

- **Audit Procedure**

Every 18-36 months, the Commissary Director will mail to each supplier, a letter (Appendix D) along with a stamped return envelope requesting verification of information contained in Appendix E. Follow-up phone calls and/or visits will be made to those vendors who fail to return a completed form. Completed forms and visit reports will be kept in a permanent file and updated as needed by the Commissary Director.

102.6.7 DISTRIBUTION/EQUIPMENT TEAM

The Distribution/Equipment Team provides necessary equipment and personnel for movement of material and people to, from, and through the crisis area for the duration of the recovery effort.

- **Major Functions**

- a) Furnish vehicles/operators for personnel and equipment movement.
- b) Provide common carrier and specialized carrier service for specific material and personnel needs.
- c) Coordinate, trace, and expedite material deliveries and shipments in and out of recovery site.
- d) Coordinate with Fleet Services for fuel for on-site recovery vehicles and/or equipment.

- **First Call Out**

The first contingency will begin with establishment of base operations. This will include personnel establishment and transport equipment assessment.

- **Backup Equipment**

As the first move is taking place and work has begun, a total equipment assessment will be made to determine present, and future needs in personnel and material movement. This will also include establishment of busing and van schedules and route between plant facilities and between places of lodging and airport facilities to plant facilities, as required.

Additional transport equipment as well as operating personnel in the Duke Power Company system are also available on a phone call notice as need is determined.

102.7 APPENDIX

- Appendix A - EOF SSG Manager Activation Checklist
- Appendix B - EOF Shutdown Checklist
- Appendix C - Administration Staff Checklist
- Appendix D - Supplier Verification of Information Letter
- Appendix E - Commissary Supplies Agreement Form
- Appendix F - Site Emergency Response Equipment List
- Appendix G - Emergency Response Equipment
- Appendix H - Site Emergency Materials List
- Appendix I - Facilities Staff Checklist

Appendix A

EOF SSG MANAGER ACTIVATION CHECKLIST

NOTE: Initial on line left of item as completed.

- _____ Sign-in on the Site Services Group Board. Put on title nametag.
- _____ Sign-in on the EOF Director's room board.
- _____ Establish contact with the NSC OSC liaison (885-3085).
- _____ Establish contact with the SSG and NSC Evacuation/Relocation Coordinator.
- _____ Confirm arrival of SSG support team Directors via SSG Sign-in board.
(Admin., Commissary, Facilities, etc.). Call out other Directors if needed.
- _____ After EOF activation, confirm the Administrative Director has notified
insurance agents.
- _____ Attend EOF Management meeting as requested by EOF Director.
- _____ Collect (24) hr. shift rotation schedules for all ERO support teams as
requested by EOF Director.
- _____ Identify any Medical Emergency Response Team (MERT) members to the
EOF Director upon request.
- _____ Notify EOF Director when food or refreshments are ready to serve.
- _____ When calling in additional personnel, ensure they are Fit for Duty before
arriving.

Appendix B

Page 1 of 1

EOF SHUTDOWN CHECKLIST

NOTE: Initial on line left of item as completed.

Administration

- _____ Verify a minimum of (5) control copies of each procedure in the ERO Procedures Cabinet and the cabinet is locked
- _____ Arrange return of relocated office equipment
- _____ Notify Hotels/Motels of release of rooms being held for reservation
- _____ Assist personnel needing airline transportation
- _____ Notify Corporate Insurance contact as to Emergency status.

Procurement (NSC)

- _____ Transfer information on outstanding requisitions to normal Purchasing contacts

Facilities

- _____ Secure radio base stations
- _____ Return Media Center phones to storage location
- _____ Return portable communications equipment to storage location (if applicable)
- _____ Verify public address system is off.

Commissary

- _____ Notify vendors to discontinue food service to EOF, OSC, and TSC
- _____ Make arrangements for trash removal

Distribution /
Equipment

- _____ Arrange for transport of relocated equipment to original location (if applicable)
- _____ Arrange for transportation home for personnel (as needed)

Appendix C

ADMINISTRATION STAFF CHECKLIST

NOTE: Initial on line left of item as completed.

- _____ Verify clock in the SSG Room is synchronized with the digital clock in the EOF Director's area.
- _____ Set up EOF SSG area. (Get pads, pencils, etc.)
- _____ Data representation in EOF SSG office. (Telephone Books)
- _____ Provide for equipment needs and administrative support of news media.
- _____ Verify copy machines/telecopiers are turned on and functional.
- _____ Verify at least (5) copies of procedures are in the EOF procedure cabinet.
- _____ Provide a (24) hour shift list of the Administration team for the SSG Manager.
- _____ Copy logbook at completion of drill.
- _____ Notify Corporate Insurance of Station status.
 - a. Update of Alert status
 - b. Which Unit is affected
 - c. Status of Unit (i.e. leaking, contained, etc.)

Appendix D

SUPPLIER VERIFICATION OF INFORMATION LETTER

Dear Sir or Madam:

Your company has been previously contacted by a member of the Oconee Nuclear Site Emergency Response Team concerning your participation in upcoming emergency exercises at the Oconee Nuclear Site.

These exercises are to prepare us to manage an actual emergency should one ever occur. If an actual emergency should occur, your company could be called on to supply commodities needed to manage the situation.

The attached form, when verified by you, will enable us to maintain our current state of preparedness. Please sign and date the attached information and return it to me in the enclosed envelope.

Yours very truly,

Commissary Director
Oconee Nuclear Station
Site Services Group
Emergency Response Plan
Duke Power Company

Attachments

Appendix E

COMMISSARY SUPPLIES AGREEMENT FORM

PERIOD COVERED: Please check one:

18 Months _____ 24 Months _____ 30 Months _____ 36 Months _____

SUPPLIER NAME: _____

- 1. Commodities Supplied During Actual Emergency or Exercise.**

- 2. Person's Name/Telephone Number to Call in Case of Emergency.**

- 3. Maximum Response Time by Above Vendor:**

TO: Emergency Operations Facility
Issaqueena Trail
Clemson, South Carolina

Duke Power Company
Oconee Nuclear Station
7800 Rochester Hwy.
Seneca, South Carolina 29672

4. I have reviewed the above information and affirm that it is accurate and current with the following exceptions:

Signed: _____ Title: _____ Date: _____

Appendix F
SITE EMERGENCY RESPONSE EQUIPMENT
(Equipment Kept On Site)

DESCRIPTION

- YARD TRACTOR OR EQUIVALENT
- TRAILER EQUIPMENT HAULING
- CRANE, 22-TON ROUGH TERRAIN
- FORKLIFT, 5000 LBS CAPACITY
- FORKLIFT, 8000 LBS CAPACITY
- FORKLIFT, 18000 LBS CAPACITY
- WELDERS, MOBILE
- AIR COMPRESSOR MOBILE WITH 1300 CFM
- BOOM TRUCK
- CABLE REEL CART

Appendix G
EMERGENCY RESPONSE EQUIPMENT
(On-site Within Four (4) Hours)

QTY	DESCRIPTION
1	ROAD TRACTOR OR EQUIVALENT
2	TRAILERS, EQUIPMENT AND MATERIALS
1	TRAILER, MOTOR LOAD CONTROL CENTER
1	CRANE, 40-TON HYDRAULIC TRUCK
2	SUMP PUMPS, GAS POWERED
1	PUMP, DIESEL
1	LOADER/BACKHOE
1	TRUCK DUMP
2	TRUCKS, BOOM
1	CORE DRILL, AIR OPERATED
2	GENERATORS, 30KVA
1	GENERATOR 200KVA
2	GENERATORS, 5KW, 50002
2	LIGHT PLANTS

Appendix H

SITE EMERGENCY MATERIALS LIST
(Nuclear Supply Chain Purchasing Team)

QUANTITY	DESCRIPTION	BUILDING
1	Emergency switchgear - Trailer mounted	8019 (2G)
1	Manual Spring Charging Tool	8019 (2G)
1	Cable Tray for Emergency switchgear	8019 (2G)
17	Reels of cable for power to pump motors and valves	8019 (2G)
17	Cable reel stands	8019(2G)
-	Parts and materials for cable connections	8093 QA Area(3A)
3	Valve control panels	8093 Bay Area (3A)
9	Nitrogen bottles for pneumatic valves	8093 QA Area(3A)
9	Pressure regulators for pneumatic valves	8093 QA Area(3A)
6	Sets of copper tubing for pneumatic valves	8093 QA Area(3A)
	Parts & materials for tubing connections	8093 QA Area(3A)
12	Pressure indicators	8093 QA Area(3A)
6	Pressure testers	8093 QA Area(3A)
3	Thermometers	8093 QA Area(3A)
	Parts & materials for instrument connections	8093 QA Area(3A)
3	Thermometers	8093 QA Area(3A)
-	Parts & materials for instrument connections	8093 QA Area(3A)
15	Cla-ton 500-watt light stands	8093 QA Area(3A)
17	Pipes for cable reels	8019 (2G)
-	"Herculite" for covering emergency switchgear	8093 (3A)

Appendix I

FACILITIES STAFF CHECKLIST

NOTE: Initial on line left of item as completed.

_____ Sign-in on logbook upon entry to EOF listing 24-hr. shift rotation coverage.

_____ Sign-in on Site Services Group Board and put on nametag.

_____ Turn PA System on.

_____ Check building temperature.

_____ Upon EOF activation, contact College Street Center to inform them of the need to keep mainframe computers available in order to support Drill/Event applications, such as Lotus Notes and information retrieval screens available (Host Sessions). **Telephone Number: 8-382-5868**

_____ Contact SPOC Helpline for computer/telephone problems. **Telephone Number: 8-382-7762**

_____ If power failure occurs at EOF, switch the generator over to main power. Control panel located at outside Equipment Room in rear of building.

_____ When EOF operation has been terminated, contact College Street Center to inform them of drill status.

_____ When EOF operation has been terminated, turn PA System off.

_____ When EOF operation has been terminated, turn building temperature back to original setting.