Duke Energy

W. R. McCollum, Jr.
Vice President

Duke Energy Corporation
Oconee Nuclear Station
7800 Rochester Highway
Seneca, SC 29672
(864) 885-3107 OFFICE
(864) 885-3564 FAX

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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 2001-05

Please find attached for your use and review copies of the revision to the Oconee Nuclear Station Emergency Plan: Volume C Revision 2001-05, June 2001.

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 Mike Thorne, Emergency Planning Manager at 864-885-3210.

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

Very truly yours,

W. R. McCollum, Jr.
VP, Oconee Nuclear Site

xc: (w/2 copies of attachments)
Mr. Luis Reyes,
Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
61 Forsyth St., SW, Suite 24T23
Atlanta, GA 30303

w/copy of attachments
Mr. Steven Baggett
Rockville, Maryland

(w/o Attachments, Oconee Nuclear Station)
NRC Resident Inspector
M. D. Thorne, Manager, Emergency Planning

A045

June 6, 2001

OCONEE NUCLEAR SITE
INTRASITE LETTER

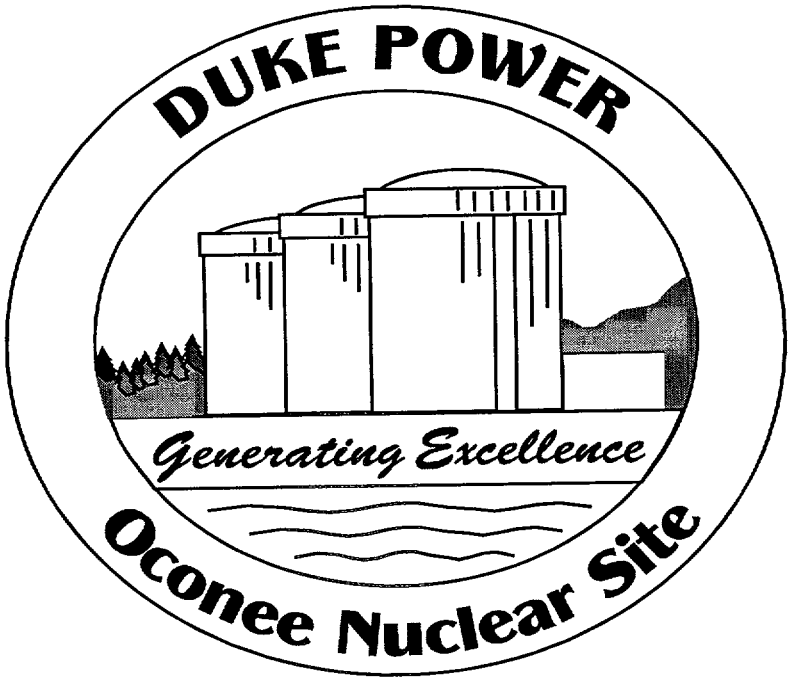
SUBJECT: Emergency Plan Implementing Procedures
Volume C, Revision 2001-05

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

REMOVE	ADD
Cover Sheet - Rev. 2001-04	Cover Sheet Rev. 2001-05
Table of Contents, Page 1	Table of Contents, Page 1
RP/0/B/1000/001 - 01/30/01	RP/0/B/1000/001 - 05/14/01
RP/0/B/1000/002 - 01/30/01	RP/0/B/1000/002 - 06/05/01
RP/0/B/1000/019 - 01/30/01	RP/0/B/1000/019 - 06/05/01

DUKE POWER

EMERGENCY PLAN
IMPLEMENTING PROCEDURES
VOLUME C



APPROVED:

W. W. Foster, Manager
Safety Assurance

06/06/2001
Date Approved

06/06/2001
Effective Date

VOLUME C
REVISION 2001-05
JUNE, 2001

VOLUME C
TABLE OF CONTENTS

(R06-97)

INFORMATION ONLY

Duke Power Company
PROCEDURE PROCESS RECORD

(1) ID No. RP/0/B/1000/001

Revision No 010

PREPARATION

Station Oconee Nuclear Station

(3) Procedure Title Emergency Classification

(4) Prepared By Donice Kelley Date 05/10/2001

(5) Requires 10CFR50.59 evaluation?
- ☐ Yes (New procedure or revision with major changes)
- ☒ No (Revision with minor changes)
- ☐ No (To incorporate previously approved changes)

(6) Reviewed By Ray Waterman (QR) Date 5/14/01

Cross-Disciplinary Review By _____ (QR)NA____ Date _____

Reactivity Mgmt. Review By _____ (QR)NA____ Date _____

(7) Additional Reviews

QA Review By _____ Date _____

Reviewed By _____ Date _____

Reviewed By _____ Date _____

(8) Temporary Approval *(if necessary)*

By _____ (SRO/QR) Date _____

By _____ (QR) Date _____

(9) Approved By M. A Thom Date 5-14-01

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 Listed 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 Site **Emergency Classification** **Reference Use**	Procedure No. RP/**0**/B/1000/001 Revision No. 010 Electronic Reference No. OX002WOS

Emergency Classification

NOTE: This procedure is an implementing procedure to the Oconee Nuclear Site Emergency plan and must be forwarded to Emergency Planning within three (3) working days of approval.

1. Symptoms

1.1 This procedure describes the immediate actions to be taken to recognize and classify an emergency condition.

1.2 This procedure identifies the four emergency classifications and their corresponding Emergency Action Levels (EALs).

1.3 This procedure provides reporting requirements for non-emergency abnormal events.

1.4 The following guidance is to be used by the Emergency Coordinator/EOF Director in assessing emergency conditions:

1.4.1 The Emergency Coordinator/EOF Director shall review all applicable initiating events to ensure proper classification.

1.4.2 The BASIS Document (Volume A, Section D of the Emergency Plan) is available for review if any questions arise over proper classification.

1.4.3 **IF** An event occurs on more than one unit concurrently,

THEN The event with the higher classification will be classified on the Emergency Notification Form.

A. Information relating to the problem(s) on the other unit(s) will be captured on the Emergency Notification Form as shown in RP/0/B/1000/015A, (Offsite Communications From The Control Room), RP/0/B/1000/015B, (Offsite Communications From The Technical Support Center) or RP/0/B/1000/015C, (Offsite Communications From The Emergency Operations Facility).

1.4.4 **IF** An event occurs,

AND A lower or higher plant operating mode is reached before the Classification can be made,

THEN The classification shall be based on the mode that existed at the time the event occurred.

1.4.5 The Fission Product Barrier Matrix is applicable only to those events that occur at Hot Shutdown or higher.

A. An event that is recognized at Cold Shutdown or lower shall not be classified using the Fission Product Barrier Matrix.

1. Reference should be made to the additional enclosures that provide Emergency Action Levels for specific events (e.g., Severe Weather, *Fire*, Security).

1.5 **IF** A transient event should occur,

THEN Review the following guidance:

1.5.1 **IF** An Emergency Action Level (EAL) identifies a specific duration

AND The Emergency Coordinator/EOF Director assessment concludes that the specified duration is exceeded or will be exceeded, (i.e.; condition cannot be reasonably corrected before the duration elapses),

THEN Classify the event.

1.5.2 **IF** A plant condition exceeding EAL criteria is corrected before the specified duration time is exceeded,

THEN The event is **NOT** classified by that EAL.

A. Review lower severity EALs for possible applicability in these cases.

NOTE: Reporting under 10CFR50.72 may be required for the following step. Such a condition could occur, for example, if a follow up evaluation of an abnormal condition uncovers evidence that the condition was more severe than earlier believed.

1.5.3 **IF** A plant condition exceeding EAL criteria is not recognized at the time of occurrence, but is identified well after the condition has occurred (e.g.; as a result of routine log or record review)

AND The condition no longer exists,

THEN An emergency shall **NOT** be declared.

1.5.4 **IF** An emergency classification was warranted, but the plant condition has been corrected prior to declaration and notification,

THEN The Emergency Coordinator must consider the potential that the initiating condition (e.g.; Failure of Reactor Protection System) may have caused plant damage that warrants augmenting the on shift personnel through activation of the Emergency Response Organization.

A. **IF** An ***Unusual Event*** condition exists,

THEN Make the classification as required.

1. The event may be terminated in the same notification or as a separate termination notification.

B. **IF** An ***Alert, Site Area Emergency***, or ***General Emergency*** condition exists,

THEN Make the classification as required,

AND Activate the Emergency Response Organization.

1.6 Emergency conditions shall be classified as soon as the Emergency Coordinator/EOF Director assessment determines that the Emergency Action Levels for the Initiating Condition have been exceeded.

2. Immediate Actions

2.1 Determine the operating mode that existed at the time the event occurred prior to any protection system or operator action initiated in response to the event.

2.2 **IF** The unit is at Hot Shutdown or higher

AND The condition/event affects fission product barriers,

THEN GO TO Enclosure 4.1, (Fission Product Barrier Matrix).

2.2.1 Review the criteria listed in Enclosure 4.1, (Fission Product Barrier Matrix) and make the determination if the event should be classified.

2.3 Review the listing of enclosures to determine if the event is applicable to one of the categories shown.

2.3.1 **IF** One or more categories are applicable to the event,

2.3.2 **THEN** Refer to the associated enclosures.

2.3.3 Review the EALs and determine if the event should be classified.

A. **IF** An EAL is applicable to the event,

THEN Classify the event as required.

2.4 **IF** The condition requires an emergency classification,

THEN GO TO RP/0/B/1000/002, (Control Room Emergency Coordinator Procedure) Subsequent Actions.

2.5 Continue to review the emergency conditions to assure the current classification continues to be applicable.

3. Enclosures

E ure 4.1
Fission Product Barrier Matrix

DETERMINE THE APPROPRIATE CLASSIFICATION USING THE TABLE BELOW: **CIRCLE EALS CHOSEN. ADD POINTS TO CLASSIFY. (SEE NOTE BELOW)**

RCS BARRIERS (BD 5-7)		FUEL CLAD BARRIERS (BD 8-9)		CONTAINMENT BARRIERS (BD 10-12)	
Potential Loss (4 Points)	**Loss (5 Points)**	**Potential Loss (4 Points)**	**Loss (5 Points)**	**Potential Loss (1 Point)**	**Loss (3 Points)**
RCS Leakrate > Makeup capacity of one HPI pump in normal makeup mode (approx. 160 gpm) with Letdown isolated.	RCS Leak rate > available makeup capacity as indicated by a loss of subcooling	Average of the 5 highest CETC ≥ 700° F	Average of the 5 highest CETC ≥ 1200° F	CETC ≥ 1200° F ≥ 15 minutes **OR** CETC ≥ 700° F ≥ 15 minutes with a *valid* RVLS reading 0"	Rapid unexplained containment pressure decrease after increase **OR** containment pressure or sump level not consistent with LOCA
SGTR > Makeup capacity of one HPI pump in normal makeup mode (approx. 160 gpm) with Letdown isolated.		*Valid* RVLS reading of 0" **NOTE:** RVLS is **NOT** valid if one or more RCPs are running **OR** if LPI pump(s) are running.	Coolant activity ≥ 300 µCi/ml DEI	RB pressure ≥ 59 psig **OR** RB pressure ≥ 10 psig and no RBCU or RBS	Failure of secondary side of SG results in a direct opening to the environment with P/S leakage ≥ 10 gpm in the same SG
Entry into the TSOR (Thermal Shock) operating range	1RIA 57/58 reading ≥ 1.0 R/hr 2 RIA 57 reading ≥ 1.6 R/hr 2 RIA 58 reading ≥ 1.0 R/hr 3RIA 57/58 reading ≥ 1.0 R/hr		**Hours Since SD** / **RIA57/58 R/hr** 0 - < 0.5 : ≥ 300/150 0.5 - < 2.0 : ≥ 80/40 2.0 - 8.0 : ≥ 32/16	**Hours Since SD** / **RIA57/58 - R/hr** 0 - < 0.5 : ≥ 1800/860 0.5 - < 2.0 : ≥ 400/195 2.0 - 8.0 : ≥ 280/130	Failure of secondary side of SG results in a direct opening to the environment with P/S leakage ≥ 10 gpm in the other SG **AND** Feeding SG with secondary side failure from the affected unit
HPI Forced Cooling	RCS pressure spike ≥ 2750 psig			Hydrogen concentration ≥ 9%	Containment isolation is incomplete and a release path to the environment exists
Emergency Coordinator/EOF Director judgment	Emergency Coordinator/EOF Director judgment	Emergency Coordinator/EOF Director judgment	Emergency Coordinator/EOF Director judgment	Emergency Coordinator/EOF Director judgment	Emergency Coordinator/EOF Director judgment

UNUSUAL EVENT (1-3 Total Points)	ALERT (4-6 Total Points)	SITE AREA EMERGENCY (7-10 Total Points)	GENERAL EMERGENCY (11-13 Total Points)
OPERATING MODE: 1, 2, 3, 4 ♦ Any potential loss of Containment ♦ Any loss of containment	**OPERATING MODE:** 1, 2, 3, 4 ♦ Any potential loss or loss of the Fuel Clad ♦ Any potential loss or loss of the RCS	**OPERATING MODE:** 1, 2, 3, 4 ♦ Loss of any two barriers ♦ Loss of one barrier and potential loss of either RCS or Fuel Clad Barriers ♦ Potential loss of both the RCS and Fuel Clad Barriers	**OPERATING MODE:** 1, 2, 3, 4 ♦ Loss of any two barriers and potential loss of the third barrier ♦ Loss of all three barriers
INITIAL NOTIFICATION REQUIREMENTS: **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1,2,3,4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1,2,3,4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **.NOTIFY 1,2,3,4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1,2,3,4**

NOTE: An event with multiple events could occur which would result in the conclusion that exceeding the loss or potential loss threshold is **IMMINENT** (i.e., within 1-3 hours). In this IMMINENT LOSS situation, use judgment and classify as if the thresholds are exceeded.

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
1. *RCS LEAKAGE* (BD 14) ========== **OPERATING MODE:** 1, 2, 3, 4 A. Unidentified leakage ≥ 10 gpm B. Pressure boundary leakage ≥ 10 gpm C. Identified leakage ≥ 25 gpm 2. ***UNPLANNED* LOSS OF MOST OR ALL SAFETY SYSTEM ANNUNCIATION/ INDICATION IN CONTROL ROOM FOR > 15 MINUTES (BD 15)** ========== **OPERATING MODE:** 1, 2, 3, 4 A.1 *Unplanned* loss of > 50% of the following annunciators on one unit for > 15 minutes: **Units 1 & 3** 1 SA1-9, 14-16, and 18 3 SA1-9, 14-16, and 18 **Unit 2** 2 SA1-9, 14-16 **AND** A.2 Loss of annunciators or indicators requires additional personnel (beyond normal shift complement) to safely operate the unit 3. **INABILITY TO REACH REQUIRED SHUTDOWN WITHIN LIMITS (BD 16)** ========== **OPERATING MODE:** 1, 2, 3, 4 A. Required operating mode not reached within TS LCO action statement time **(CONTINUED)**	1. ***UNPLANNED* LOSS OF MOST OR ALL SAFETY SYSTEM ANNUNCIATION/ INDICATION IN CONTROL ROOM (BD 19)** ========== **OPERATING MODE:** 1, 2, 3, 4 A.1 *Unplanned* loss of > 50% of the following annunciators on one unit for > 15 minutes: **Units 1 & 3** 1 SA1-9, 14-16, and 18 3 SA1-9, 14-16, and 18 **Unit 2** 2 SA1-9, 14-16 **AND** A.2 Loss of annunciators /indicators requires additional personnel (beyond normal shift complement) to safely operate the unit **AND** A.3 Significant plant transient in progress **OR** A.4 Loss of the OAC and **ALL** PAM indications **(END)**	1. **INABILITY TO MONITOR A SIGNIFICANT TRANSIENT IN PROGRESS (BD 21)** ========== **OPERATING MODE:** 1, 2, 3, 4 A.1 *Unplanned* loss of > 50% of the following annunciators on one unit for > 15 minutes: **Units 1 & 3** 1 SA1-9, 14-16, and 18 3 SA1-9, 14-16, and 18 **Unit 2** 2 SA1-9, 14-16 **AND** A.2 A *significant transient* is in progress **AND** A.3 Loss of the OAC and **ALL** PAM indications **AND** A.4 *Inability to directly monitor* any one of the following functions: 1. Subcriticality 2. Core Cooling 3. Heat Sink 4. RCS Integrity 5. Containment Integrity 6. RCS Inventory **(END)**	
INITIAL NOTIFICATION REQUIREMENTS: **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
4. *UNPLANNED* LOSS OF ALL ONSITE OR OFFSITE COMMUNICATIONS (BD 17) ========== OPERATING MODE: All A. Loss of all onsite communications capability (ROLM system, PA system, Pager system, Onsite Radio system) affecting ability to perform Routine operations B. Loss of all onsite communications capability (Selective Signaling, NRC FTS lines, Offsite Radio System, AT&T line) affecting ability to communicate with offsite authorities. 5. FUEL CLAD DEGRADATION (BD 18) ========== OPERATING MODE: All: A. DEI - >5µCi/ml (END)			
INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1,2,3,4			

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
1 **ANY *UNPLANNED* RELEASE OF GASEOUS OR LIQUID RADIOACTIVITY TO THE ENVIRONMENT THAT EXCEEDS TWO TIMES THE SLC LIMITS FOR 60 MINUTES OR LONGER (BD 23)** **OPERATING MODE:** All A. *Valid* indication on radiation monitor RIA 33 of ≥ 4.06E+06 cpm for > 60 minutes (See Note 1) B. *Valid* indication on radiation monitor RIA 45 of ≥ 1.33E+06 cpm for > 60 minutes (See Note 1) C. Liquid effluent being released exceeds two times SLC 16.11.1 for > 60 minutes as determined by Chemistry Procedure D. Gaseous effluent being released exceeds two times SLC 16.11.2 for > 60 minutes as determined by RP Procedure **NOTE 1**: If monitor reading is sustained for the time period indicated in the EAL **AND** the required assessments (procedure calculations) cannot be completed within this period, declaration must be made on the *valid* Radiation Monitor reading. (CONTINUED)	1. **ANY *UNPLANNED* RELEASE OF GASEOUS OR LIQUID RADIOACTIVITY TO THE ENVIRONMENT THAT EXCEEDS 200 TIMES RADIOLOGICAL TECHNICAL SPECIFICATIONS FOR 15 MINUTES OR LONGER (BD 28)** **OPERATING MODE:** All A. *Valid* indication on RIA 46 of ≥ 2.98E+04 cpm for >15 minutes (See Note 1) B.1 RIA 33 **HIGH** Alarm **AND** B.2 Liquid effluent being released exceeds 200 times the level of SLC 16.11.1 for > 15 minutes as determined by Chemistry Procedure C. Gaseous effluent being released exceeds 200 times the level of SLC 16.11.2 for >15 minutes as determined by RP Procedure 2. **RELEASE OF RADIOACTIVE MATERIAL OR INCREASES IN RADIATION LEVELS THAT IMPEDES OPERATION OF SYSTEMS REQUIRED TO MAINTAIN SAFE OPERATION OR TO ESTABLISH OR MAINTAIN COLD SHUTDOWN (BD 30)** **OPERATING MODE:** All A. *Valid* radiation reading ≥ 15 mRad/hr in CR, CAS, or, Radwaste CR B. *Unplanned*/unexpected *valid* area monitor readings exceed limits stated in Enclosure 4.9 (CONTINUED)	1. **BOUNDARY DOSE RESULTING FROM ACTUAL/IMMINENT RELEASE OF GASEOUS ACTIVITY (BD 32)** **OPERATING MODE:** All A. *Valid* reading on RIA 46 of ≥ 2.98E+05 cpm for >15 minutes (See Note 2) B. *Valid* reading on RIA 57 or 58 as shown on Enclosure 4.8 (See Note 2) C. Dose calculations result in a dose projection at the *site boundary* of: ≥ 100 mRem TEDE or 500 mRem CDE adult thyroid D. Field survey results indicate *site boundary* dose rates exceeding ≥100 mRad/hr expected to continue for more than one hour **OR** D.1 Analyses of field survey samples indicate adult thyroid dose commitment of ≥ 500 mRem CDE (3.84 E^{-7} µCi/ml) for one hour of inhalation **NOTE 2:** If actual Dose Assessment cannot be completed within 15 minutes, then the *valid* radiation monitor reading should be used for emergency classification. (CONTINUED)	1. **BOUNDARY DOSE RESULTING FROM ACTUAL/ IMMINENT RELEASE OF GASEOUS ACTIVITY (BD 36)** **OPERATING MODE:** All A. *Valid* reading on RIA 46 of ≥ 2.98E+06 cpm for ≥15 minutes (See Note 3) B. *Valid* reading on RIA 57 or 58 as shown on Enclosure 4.8 (See Note 3) C. Dose calculations result in a dose projection at the *site boundary* of: C.1 ≥ 1000 mRem TEDE **OR** C.2 ≥ 5000 mRem CDE adult thyroid D. Field survey results indicate *site boundary* dose rates exceeding ≥1000 mRad/hr expected to continue for more than one hour **OR** D.1 Analyses of field survey samples indicate adult thyroid dose commitment of ≥ 5000 mRem CDE for one hour of inhalation **NOTE 3**: If actual Dose Assessment cannot be completed within 15 minutes, then the *valid* radiation monitor reading should be used for emergency classification. (END)
INITIAL NOTIFICATION REQUIREMENTS: **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**

Assumptions used for calculation of vent monitors RIA 45 & 46:

1. Average annual meteorology (1.672 E-6 sec/m^3), semi-elevated
2. Vent flow rate 65,000 cfm (average daily flow rate)
3. No credit is taken for vent filtration
4. One hour release duration for ***Unusual Event***, 15 minute duration for ***Alert, Site Area Emergency, General Emergency***
5. *General Emergency* PAGs are 1 rem TEDE and 5 rem CDE; *Site Area Emergency* determination is based on 10% of the *General Emergency* PAGs
6. Calculations for monitor readings are based on whole body dose
7. Standard ODCM guidance together with NUMARC guidance indicates that effluent releases are based on Technical Specification releases

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
2 UNEXPECTED INCREASE IN PLANT RADIATION OR AIRBORNE CONCENTRATION (BD 25) **OPERATING MODE:** All A. LT 5 reading 14″ and decreasing with makeup not keeping up with leakage **WITH** fuel in the core B. *Uncontrolled* water level decrease in the SFP and fuel transfer canal with all irradiated fuel assemblies remaining covered by water C. 1 R/hr radiation reading at one foot away from a damaged storage cask located at the ISFSI D. *Valid* area monitor readings exceeds limits stated in Enclosure 4.9. (END)	**3. MAJOR DAMAGE TO IRRADIATED FUEL OR LOSS OF WATER LEVEL THAT HAS OR WILL RESULT IN THE UNCOVERING OF IRRADIATED FUEL OUTSIDE THE REACTOR VESSEL (BD 31)** **OPERATING MODE:** All A. *Valid* RIA 3, 6, 41, OR 49 **HIGH** Alarm B. **HIGH** Alarm for portable area monitors on the main bridge or SFP bridge C Report of visual observation of irradiated fuel uncovered D. Operators determine water level drop in either the SFP or fuel transfer canal will exceed makeup capacity such that irradiated fuel will be uncovered (END)	**2. LOSS OF WATER LEVEL IN THE REACTOR VESSEL THAT HAS OR WILL UNCOVER FUEL IN THE REACTOR VESSEL (BD 35)** **OPERATING MODE:** 5, 6 A.1 Failure of heat sink causes loss of Cold Shutdown condition **AND** A.2 LT 5 indicates 0 inches after initiation of RCS makeup B.1 Failure of heat sink causes loss of Cold Shutdown condition **AND** B.2 Either train ultrasonic level indication less than 0 inches and decreasing after initiation of RCS makeup **NOTE:** This Initiating Condition is also located in Enclosure 4.4., (Loss of Shutdown Functions). High radiation levels will also be seen with this condition. (END)	
INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
	1. FAILURE OF RPS TO COMPLETE OR INITIATE A Rx SCRAM (BD 39) **OPERATING MODE** 1, 2, 3 A.1 *Valid* reactor trip signal received or required **WITHOUT** automatic scram **AND** A.1.1 DSS has inserted Control Rod Groups 5, 6, 7 **OR** A.1.2 Manual trip from the Control Room is successful and reactor power is less than 5% and decreasing **2. INABILITY TO MAINTAIN PLANT IN COLD SHUTDOWN (BD 41)** **OPERATING MODE:** 5, 6 A.1 Loss of LPI and/or LPSW **AND** A.2 Inability to maintain RCS temperature below 200° F as indicated by either of the following: A.2.1 RCS temperature at the LPI Pump Suction **OR** A.2.2 Average of the 5 highest CETCs as indicated by ICCM display **OR** A.2.3 Visual observation **(END)**	**1. FAILURE OF RPS TO COMPLETE OR INITIATE A Rx SCRAM (BD 42)** **OPERATING MODE:** 1, 2 A.1 *Valid* reactor trip signal received or required **WITHOUT** automatic scram **AND** A.2 DSS has **NOT** inserted Control Rod Groups 5, 6, 7 **AND** A.3 Manual trip from the Control Room was **NOT** successful in reducing reactor power to less than 5% and decreasing **2. COMPLETE LOSS OF FUNCTION NEEDED TO ACHIEVE OR MAINTAIN HOT SHUTDOWN (BD 43)** **OPERATING MODE:** 1, 2, 3, 4 A. Average of the 5 highest CETCs ≥1200° F shown on ICCM B. Unable to maintain reactor subcritical C. SSF feeding SG per EOP **(CONTINUED)**	**1. FAILURE OF RPS TO COMPLETE AUTOMATIC SCRAM AND MANUAL SCRAM NOT SUCCESSFUL WITH INDICATION OF CORE DAMAGE (BD 45)** **OPERATING MODE:** 1, 2 A.1 *Valid* Rx trip signal received or required **WITHOUT** automatic scram **AND** A.2 Manual trip from the Control Room was **NOT** successful in reducing reactor power to < 5% and decreasing **AND** A.3 Average of the 5 highest CETCs ≥1200° F on ICCM **(END)**
	INITIAL NOTIFICATION REQUIREMENTS: **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
		3. **LOSS OF WATER LEVEL IN THE REACTOR VESSEL THAT HAS OR WILL UNCOVER FUEL IN THE REACTOR VESSEL (BD 44)** **OPERATING MODE:** 5, 6 A.1 Failure of heat sink causes loss of Cold Shutdown conditions **AND** A.2 LT-5 indicates 0 inches after initiation of RCS Makeup B.1 Failure of heat sink causes loss of Cold Shutdown conditions **AND** B.2 Either train ultrasonic level indication less than 0 inches and decreasing after initiation of RCS makeup **(END)**	
		INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY **NOTIFY 1, 2, 3, 4**	

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
1. LOSS OF ALL OFFSITE POWER TO ESSENTIAL BUSSES FOR GREATER THAN 15 MINUTES (BD 47) **OPERATING MODE:** All A.1 Loss of all offsite AC power to both the Red and Yellow Busses for > 15 minutes **AND** A.2 Unit auxiliaries are being supplied from Keowee or CT5 **2. *UNPLANNED* LOSS OF REQUIRED DC POWER FOR GREATER THAN 15 MINUTES (BD 48)** **OPERATING MODE:** 5, 6 A.1 *Unplanned* loss of vital DC power to required DC busses as indicated by bus voltage less than 110 VDC **AND** A.2 Failure to restore power to at least one required DC bus within 15 minutes from the time of loss **(END)**	**1. LOSS OF ALL OFFSITE AC POWER AND LOSS OF ALL ONSITE AC POWER TO ESSENTIAL BUSSES (BD 49)** **OPERATING MODE:** 5, 6 Defueled A.1 MFB 1 and 2 de-energized **AND** A.2 Failure to restore power to at least one MFB within 15 minutes from the time of loss of both offsite and onsite AC power **2. AC POWER CAPABILITY TO ESSENTIAL BUSSES REDUCED TO A SINGLE SOURCE FOR GREATER THAN 15 MINUTES (BD 50)** **OPERATING MODE:** 1, 2, 3, 4 A. AC power capability has been degraded to a single power source for > 15 minutes due to the loss of all but one of: Unit Normal Transformer Unit SU Transformer Another Unit SU Transformer CT4 CT5 **(END)**	**1. LOSS OF ALL OFFSITE AC POWER AND LOSS OF ALL ONSITE AC POWER TO ESSENTIAL BUSSES (BD 51)** **OPERATING MODE:** 1, 2, 3, 4 A.1 MFB 1 and 2 de-energized **AND** A.2 Failure to restore power to at least one MFB within 15 minutes from the time of loss of both offsite and onsite AC power **2. LOSS OF ALL VITAL DC POWER (BD 52)** **OPERATING MODE:** 1, 2, 3, 4 A.1 *Unplanned* loss of *vital* DC power to required DC busses as indicated by bus voltage less than 110 VDC **AND** A.2 Failure to restore power to at least one required DC bus within 15 minutes from the time of loss **(END)**	**1. PROLONGED LOSS OF ALL OFFSITE POWER AND ONSITE AC POWER (BD 54)** **OPERATING MODE:** 1, 2, 3, 4 A.1 MFB 1 and 2 de-energized **AND** A.2 SSF fails to maintain Hot Shutdown **AND** A.3 At least one of the following conditions exist: A.3.1 Restoration of power to at least one MFB within 4 hours is **NOT** likely **OR** A.3.2 Indications of continuing degradation of core cooling based on Fission Product Barrier monitoring **(END)**
INITIAL NOTIFICATION REQUIREMENTS: **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**	**INITIAL NOTIFICATION REQUIREMENTS:** **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
1. *FIRES/EXPLOSIONS* WITHIN THE PLANT (BD 57) OPERATING MODE: All NOTE: Within the plant means Turbine Building, Auxiliary Building, Reactor Building, Keowee Hydro. A. Fire within the plant not extinguished within 15 minutes of Control Room notification or verification of a Control Room alarm B. Unanticipated explosion within the plant resulting in *visible damage* to permanent structures/equipment 2. CONFIRMED SECURITY THREAT INDICATES POTENTIAL DEGRADATION IN THE LEVEL OF SAFETY OF PLANT (BD 58) OPERATING MODE: All NOTE: RP/0/B/1000/007, (Security Event), shall be used in conjunction with all security related emergency classifications. A. Discovery of *bomb* within plant *protected area* and outside security vital areas B. *Hostage/Extortion* situation C. *Violent* civil disturbance within the owner controlled area (END)	1. *FIRE/EXPLOSION* AFFECTING OPERABILITY OF PLANT SAFETY SYSTEMS REQUIRED TO ESTABLISH/MAINTAIN SAFE SHUTDOWN (BD 59) OPERATING MODE: All NOTE: Only one train of a system needs to be affected or damaged in order to satisfy this condition. A.1 *Fire/explosions* AND A.1.1 Affected safety-related system parameter indications show degraded performance OR A.1.2 Plant personnel report *visible damage* to permanent structures or equipment required for safe shutdown 2 SECURITY EVENT IN A PLANT PROTECTED AREA (BD 60) OPERATING MODE: All NOTE: RP/0/B/1000/007, (Security Event), shall be used in conjunction with all security related emergency classifications. A. *Intrusion* into plant *protected area* by a hostile force B. *Bomb* discovered in an area containing safety related equipment (END)	1. SECURITY EVENT IN A PLANT VITAL AREA (BD 61) OPERATING MODE: All NOTE: RP/0/B/1000/007, (Security Event), shall be used in conjunction with all security related emergency classifications A. *Intrusion* into any of the following plant areas by a hostile force: Reactor Building Auxiliary Building Keowee Hydro B. *Bomb* detonated in any of the following areas: • Keowee Hydro • Keowee Dam • ISFSI • Reactor Building • Auxiliary Building • SSF (END)	1. SECURITY EVENT RESULTING IN LOSS OF ABILITY TO REACH AND MAINTAIN COLD SHUTDOWN (BD 62) OPERATING MODE: All NOTE: RP/0/B/1000/007, (Security Event), shall be used in conjunction with all security related emergency classifications A. Loss of physical control of the control room due to security event B. Loss of physical control of the Aux Shutdown panel and the SSF due to a Security Event (END)
INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY. NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4

Natural Disasters, Hazards and [illegible]er Conditions Affecting Plant Safety

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
1. NATURAL AND DESTRUCTIVE PHENOMENA AFFECTING THE *PROTECTED AREA* (BD 64) **OPERATING MODE:** All A. Tremor felt and *valid* alarm on the strong motion accelerograph B Tornado striking within *Protected Area* Boundary C. Vehicle crash into plant structures/systems within the *Protected Area* Boundary D. Turbine failure resulting in casing penetration or damage to turbine or generator seals (CONTINUED)	**1. NATURAL AND DESTRUCTIVE PHENOMENA AFFECTING THE PLANT *VITAL* AREA (BD 69)** **OPERATING MODE:** All A. Tremor felt and seismic trigger actuates (0.05g) B.1 Tornado, high winds, missiles resulting from turbine failure, vehicle crashes, or other catastrophic event AND NOTE: Only one train of a safety-related system needs to be affected or damaged in order to satisfy these conditions. B.1.1 *Visible damage* to permanent structures or equipment required for safe shutdown of the unit OR B.1.2 Affected safety system parameter indications show degraded performance **2. RELEASE OF TOXIC/FLAMMABLE GASES JEOPARDIZING SYSTEMS REQUIRED TO MAINTAIN SAFE OPERATION OR ESTABLISH MAINTAIN COLD SHUTDOWN (BD 71)** **OPERATING MODE:** All A. Report/detection of *toxic gases* in concentrations that will be life-threatening to plant personnel B. Report/detection of flammable gases in concentrations that will affect the safe operation of the plant: • Reactor Building • Auxiliary Building • Turbine Building • Control Room (CONTINUED)	**1. CONTROL ROOM EVACUATION AND PLANT CONTROL CANNOT BE ESTABLISHED (BD 75)** **OPERATING MODE:** All A.1 Control Room evacuation has been initiated AND A.2 Control of the plant cannot be established from the Aux Shutdown Panel or the SSF within 15 minutes **2. KEOWEE HYDRO DAM FAILURE (BD 76)** **OPERATING MODE:** All A. Imminent/actual dam failure includes any of the following: • Keowee Hydro Dam • Little River Dam • Dikes A, B, C, or D • Intake Canal Dike **3. OTHER CONDITIONS WARRANT DECLARATION OF *SITE AREA EMERGENCY* (BD 77)** **OPERATING MODE:** All A. Emergency Coordinator/EOF Director judgment (END)	**1. OTHER CONDITIONS WARRANT DECLARATION OF GENERAL EMERGENCY (BD 78)** **OPERATING MODE:** All A.1 Emergency Coordinator/EOF Director judgment indicates: A.1.1 Actual/imminent substantial core degradation with potential for loss of containment OR A.1.2 Potential for *uncontrolled* radionuclide releases that would result in a dose projection at the site boundary greater than 1000 mRem TEDE or 5000 mRem CDE Adult Thyroid (END)
INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
2. NATURAL AND DESTRUCTIVE PHENOMENA AFFECTING KEOWEE HYDRO (BD 66) **OPERATING MODE:** All A. Reservoir elevation ≥ 807 feet with all spillway gates open and the lake elevation continues to rise B. Seepage readings increase or decrease greatly or seepage water is carrying a significant amount of soil particles C New area of seepage or wetness, with large amounts of seepage water observed on dam, dam toe, or the abutments D. Slide or other movement of the dam or abutments which could develop into a failure E. Developing failure involving the powerhouse or appurtenant structures and the operator believes the safety of the structure is questionable **3. RELEASE OF TOXIC OR FLAMMABLE GASES DEEMED DETRIMENTAL TO SAFE OPERATION OF THE PLANT (BD 67)** **OPERATING MODE:** All A. Report/detection of toxic or flammable gases that could enter within the site area boundary in amounts that can affect normal operation of the plant B. Report by local, county, state officials for potential evacuation of site personnel based on offsite event (CONTINUED)	**3. TURBINE BUILDING FLOOD (BD 72)** **OPERATING MODE:** All A. Turbine Building flood requiring use of AP/1,2,3/A/1700/10, (*Uncontrolled* Flooding Of Turbine Building) **4. CONTROL ROOM EVACUATION HAS BEEN INITIATED (BD 73)** **OPERATING MODE:** All A.1 Evacuation of Control Room **AND ONE OF THE FOLLOWING:** **AND** A.1.1 Plant control **IS** established from the Aux shutdown Panel or the SSF **OR** A.1.2 Plant control **IS BEING** established from the Aux Shutdown Panel or SSF **5. OTHER CONDITIONS WARRANT CLASSIFICATION OF AN *ALERT* (BD 74)** **OPERATING MODE:** All A.1 Emergency Coordinator judgment indicates that: A.1.1 Plant safety may be degraded **AND** A.1.2 Increased monitoring of plant functions is warranted (END)		
INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4	INITIAL NOTIFICATION REQUIREMENTS: SEE EMERGENCY TELEPHONE DIRECTORY NOTIFY 1, 2, 3, 4

UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
4 **OTHER CONDITIONS EXIST WHICH WARRANT DECLARATION OF AN *UNUSUAL EVENT* (BD 68)** **OPERATING MODE:** All A. Emergency Coordinator determines potential degradation of level of safety has occurred **(END)**			
INITIAL NOTIFICATION REQUIREMENTS: **SEE EMERGENCY TELEPHONE DIRECTORY** **NOTIFY 1, 2, 3, 4**			

Radiation Monitor Readings for Emergency Classification

NOTE: **IF** Actual Dose Assessment **cannot be** completed within 15 minutes.
THEN The *valid* monitor reading should be used for Emergency Classification.

All RIA values are considered GREATER THAN or EQUAL TO

HOURS SINCE REACTOR TRIPPED	RIA 57 R/hr		RIA 58 R/hr*	
	Site Area Emergency	General Emergency	Site Area Emergency	General Emergency
0.0 - < 0.5	5.9E+003	5.9E+004	2.6E+003	2.6E+004
0.5 - < 1.0	2.6E+003	2.6E+004	1.1E+003	1.1E+004
1.0 - < 1.5	1.9E+003	1.9E+004	8.6E+002	8.6E+003
1.5 - < 2.0	1.9E+003	1.9E+004	8.5E+002	8.5E+003
2.0 - < 2.5	1.4E+003	1.4E+004	6.3E+002	6.3E+003
2.5 - < 3.0	1.2E+003	1.2E+004	5.7E+002	5.7E+003
3.0 - < 3.5	1.1E+003	1.1E+004	5.2E+002	5.2E+003
3.5 - < 4.0	1.0E+003	1.0E+004	4.8E+002	4.8E+003
4.0 - < 8.0	1.0E+003	1.0E+004	4.4E+002	4.4E+003

*** RIA 58 is partially shielded**

Assumptions used for calculation of high range in-containment monitors RIA 57 and 58:

1. Average annual meteorology (7.308 E^{-6} sec/m^3)
2. Design basis leakage (5.6 E^6 ml/hr)
3. One hour release duration
4. *General Emergency* PAGs are 1 rem TEDE and 5 rem CDE; *Site Area Emergency* determination is based on 10% of the *General Emergency* PAGs
5. Calculations for monitor readings are based on CDE because thyroid dose is limiting
6. No credit is taken for filtration
7. LOCA conditions are limiting and provide the more conservative reading

NOTE: This Initiating Condition is not intended to apply to anticipated temporary increases due to planned events (e.g.; incore detector movement, radwaste container movement, depleted resin transfers, etc.).

MONITOR NUMBER	UNITS 1, 2, 3	
	UNUSUAL EVENT 1000x NORMAL LEVELS mRAD/HR	*ALERT* mRAD/HR
RIA 7, Hot Machine Shop Elevation 796	150	≥ 5000
RIA 8, Hot Chemistry Lab Elevation 796	4200	≥ 5000
RIA 10, Primary Sample Hood Elevation 796	830	≥ 5000
RIA 11, Change Room Elevation 796	210	≥ 5000
RIA 12, Chem Mix Tank Elevation 783	800	≥ 5000
RIA 13, Waste Disposal Sink Elevation 771	650	≥ 5000
RIA 15, HPI Room Elevation 758	**NOTE***	≥ 5000

NOTE: RIA 15 normal readings are approximately 9 mRad/hr on a daily basis. Applying 1000x normal readings would put this monitor greater than 5000 mRad/hr just for an *Unusual Event*. For this reason, an *Unusual Event* will **NOT** be declared for a reading less than 5000 mRad/hr.

1. List of Definitions and Acronyms

NOTE:	Definitions are italicized throughout procedure for easy recognition.

1.1 **ALERT** - Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.

1.2 **BOMB** - A fused explosive device

1.3 **CONDITION A** - Failure is Imminent or Has Occurred - A failure at the dam has occurred or is about to occur and minutes to days may be allowed to respond dependent upon the proximity to the dam.

1.4 **CONDITION B** - Potentially Hazardous Situation is Developing - A situation where failure may develop, but preplanned actions taken during certain events (such as major floods, earthquakes, evidence of piping) may prevent or mitigate failure.

1.5 **CIVIL DISTURBANCE** - A group of ten (10) or more people *violent*ly protesting station operations or activities at the site.

1.6 **EXPLOSION** - A rapid, *violent*, unconfined combustion, or a catastrophic failure of pressurized equipment that imparts energy of sufficient force to potentially damage permanent structures, systems, or components. A sudden failure of a pressurized pipe/line could fit this definition. This definition includes MS line rupture and FW line ruptures.

1.7 **EXTORTION** - An attempt to cause an action at the station by threat of force.

1.8 **FIRE** - Combustion characterized by heat and light. Sources of smoke, such as slipping drive belts or overheated electrical equipment, do NOT constitute *fires*. Observation of flames is preferred but is NOT required if large quantities of smoke and heat are observed.

1.9 **GENERAL EMERGENCY** - Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity. Releases can be reasonably expected to exceed EPA Protective Action Guidelines exposure levels outside the Exclusion Area Boundary.

1.10 **HOSTAGE** - A person or object held as leverage against the station to ensure demands will be met by the station.

1.11 **INTRUSION/INTRUDER** - Suspected hostile individual present in a *Protected Area* without authorization.

1.12 **INABILITY TO DIRECTLY MONITOR** - Operational Aid Computer data points are unavailable or gauges/panel indications are NOT readily available to the operator.

1.13 **LOSS OF POWER** – Emergency Action Levels (EALs) apply to the ability of electrical energy to perform its intended function, reach its intended equipment. Ex. – If both MFBs, are energized but all 4160v switchgear is not available, the electrical energy can not reach the motors intended. The result to the plant is the same as if both MFBs were de-energized.

1.14 **PROTECTED AREA** - Encompasses all Owner Controlled Areas within the security perimeter fence.

1.15 **REACTOR COOLANT SYSTEM (RCS) LEAKAGE** – RCS Operational Leakage as defined in the Technical Specification Basis B 3.4.13.

1.16 **RUPTURED** (As relates to Steam Generator) - Existence of Primary to Secondary leakage of a magnitude sufficient to require or cause a reactor trip and safety injection.

1.17 **SABOTAGE** - Deliberate damage, mis-alignment, or mis-operation of plant equipment with the intent to render the equipment unavailable.

1.18 **SAFETY-RELATED SYSTEMS AREA** - Any area within the *Protected area* which contains equipment, systems, components, or material, the failure, destruction, or release of which could directly or indirectly endanger the public health and safety by exposure to radiation.

1.19 **SIGNIFICANT TRANSIENT** - An *unplanned* event involving one or more of the following:

(1) Automatic turbine runback > 25% thermal reactor power
(2) Electrical load rejection > 25% full electrical load
(3) Reactor Trip
(4) Safety Injection System Activation

1.20 **SITE AREA EMERGENCY** - Events are in process or have occurred which involve actual or likely major failures of plant functions needed for the protection of the public. Any releases are NOT expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels outside the Exclusion Area Boundary.

1.21 **SELECTED LICENSEE COMMITMENT (SLC)** -Chapter 16 of the FSAR

1.22 **SITE BOUNDARY** - That area, including the *Protected Area*, in which DPC has the authority to control all activities including exclusion or removal of personnel and property (1 mile radius from the center of Unit 2).

1.23 **TOXIC GAS** - A gas that is dangerous to life or health by reason of inhalation or skin contact (e.g.; Chlorine).

1.24 **UNCONTROLLED** - Event is not the result of planned actions by the plant staff.

1.25 **UNPLANNED** - An event or action is UNPLANNED if it is not the expected result of normal operations, testing, or maintenance. Events that result in corrective or mitigative actions being taken in accordance with abnormal or emergency procedures are UNPLANNED.

1.26 **UNUSUAL EVENT** - Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.

1.27 **VALID** - An indication or report or condition is considered to be **VALID** when it is conclusively verified by: (1) an instrument channel check; or, (2) indications on related or redundant instrumentation; or, (3) by direct observation by plant personnel such that doubt related to the instrument's operability, the condition's existence, or the report's accuracy is removed. Implicit with this definition is the need for timely assessment.

1.28 **VIOLENT** - Force has been used in an attempt to injure site personnel or damage plant property.

1.29 **VISIBLE DAMAGE** - Damage to equipment or structure that is readily observable without measurements, testing, or analyses. Damage is sufficient to cause concern regarding the continued operability or reliability of affected safety structure, system, or component. Example damage: deformation due to heat or impact, denting, penetration, rupture,

Enclosure 4.11

Operating Modes Defined In Improved Technical Specifications

MODES

MODE	TITLE	REACTIVITY CONDITION (K_{eff})	% RATED THERMAL POWER (a)	AVERAGE REACTOR COOLANT TEMPERATURE (°F)
1	Power Operation	≥0.99	> 5	NA
2	Startup	≥0.99	≤5	NA
3	Hot Standby	<0.99	NA	≥250
4	Hot Shutdown (b)	< 0.99	NA	250 > T > 200
5	Cold Shutdown (b)	< 0.99	NA	≤ 200
6	Refueling (c)	NA	NA	NA

(a) Excluding decay heat.

(b) All reactor vessel head closure bolts fully tensioned.

(c) One or more reactor vessel head closure bolts less than fully tensioned.

1. Instructions For Using Enclosure 4.1 – Fission Product Barrier Matrix

1.1 If the unit was at Hot S/D or above, (Modes 1, 2, 3, or 4) and one or more fission product barriers have been affected, refer to Enclosure 4.1, (Fission Product Barrier Matrix) and review the criteria listed to determine if the event should be classified.

1.1.1 For each Fission Product Barrier, review the associated EALs to determine if there is a Loss or Potential Loss of that barrier. Circle any that apply.

NOTE: An event with multiple events could occur which would result in the conclusion that exceeding the loss or potential loss thresholds is imminent (i.e. within 1-3 hours). In this situation, use judgement and classify as if the thresholds are exceeded.

1.2 Three possible outcomes exist for each barrier. No challenge, potential loss, or loss. Use the worst case for each barrier and the classification table at the bottom of the page to determine appropriate classification.

1.3 The numbers in parentheses out beside the label for each column can be used to assist in determining the classification. If no EAL is met for a given barrier, that barrier will have 0 points. The points for the columns are as follows:

Barrier	Failure	Points
RCS	Potential Loss	4
	Loss	5
Fuel Clad	Potential Loss	4
	Loss	5
Containment	Potential Loss	1
	Loss	3

1.3.1 To determine the classification, add the highest point value for each barrier to determine a total for all barriers. Compare this total point value with the numbers in parentheses beside each classification to see which one applies.

1.3.2 Finally as a verification of your decision, look below the Emergency Classification you selected. The loss and/or potential loss EALs selected for each barrier should be described by one of the bullet statements.

EXAMPLE: Failure to properly isolate a 'B' MS Line Rupture outside containment, results in extremely severe overcooling.

TSOR entry conditions were satisfied.

Stresses on the 'B' S/G resulted in failure of multiple S/G tubes.

RCS leakage through the S/G exceeds available makeup capacity as indicated by loss of subcooling margin.

Barrier	EAL	Failure	Points
RCS	SGTR > Makeup capacity of one HPI pump in normal makeup mode with letdown isolated	Potential Loss	4
	Entry into TSOR operating range	Potential Loss	4
	RCS leak rate > available makeup capacity as indicated by a loss of subcooling	Loss	5
Fuel Clad	No EALs met and no justification for classification on judgment	No Challenge	0
Containment	Failure of secondary side of SG results in a direct opening to the environment	Loss	3

RCS _5_ + Fuel _0_ + Containment _3_ = Total _8_

A. Even though two Potential Loss EALs and one Loss EAL are met for the RCS barrier, credit is only taken for the worst case (highest point value) EAL, so the points from this barrier equal 5.

B. No EAL is satisfied for the Fuel Clad Barrier so the points for this barrier equal 0.

C. One Loss EAL is met for the Containment Barrier so the points for this barrier equal 3.

D. When the total points are calculated the result is 8, therefore the classification would be a *Site Area Emergency*.

E. Look in the box below "*Site Area Emergency*". You have identified a loss of two barriers. This agrees with one of the bullet statements. The classification is correct.

(R06-97) INFORMATION ONLY

Duke Power Company
PROCEDURE PROCESS RECORD

(1) ID No. RP/0/B/1000/002
Revision No 007

PREPARATION

Station Oconee Nuclear Station

(3) Procedure Title Control Room Emergency Coordinator Procedure

(4) Prepared By Donice Kelley Date 05/30/2001

(5) Requires 10CFR50.59 evaluation?
- ☐ Yes (New procedure or revision with major changes)
- ☒ No (Revision with minor changes)
- ☐ No (To incorporate previously approved changes)

(6) Reviewed By Rodney Brown (QR) Date 6/4/01
Cross-Disciplinary Review By / (QR)NA GLB Date
Reactivity Mgmt. Review By (QR)NA Date

(7) Additional Reviews
QA Review By Date
Reviewed By Date
Reviewed By Date

(8) Temporary Approval *(if necessary)*
By (SRO/QR) Date
By (QR) Date

(9) Approved By Ray Waterman for MST Date 6/5/01

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 Listed 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 Site	Procedure No. RP/0/B/1000/002
Control Room Emergency Coordinator Procedure	Revision No. 007
Reference Use	Electronic Reference No. OX002WOT

Control Room Emergency Coordinator Procedure

NOTE: This procedure is an implementing procedure to the Oconee Nuclear Site Emergency Plan and must be forwarded to Emergency Planning within three (3) working days of approval.

1. Symptoms

1.1 Events are in process or have occurred which require activation of the Oconee Nuclear Site Emergency Plan.

2. Immediate Actions

The Operations Shift Manager/Emergency Coordinator shall use this procedure until relieved by the Station Manager/Alternate in the Technical Support Center.

NOTE: Place Keeping Aids: ☐ at left of steps may be used for procedure place keeping. (☑)

☐ 2.1 **IF** **General Emergency** conditions are met,
THEN **GO TO** Enclosure 4.1 (General Emergency).

☐ 2.2 **IF** **Site Area Emergency** conditions are met,
THEN **GO TO** Enclosure 4.2 (Site Area Emergency).

☐ 2.3 **IF** **Alert** conditions are met,
THEN **GO TO** Enclosure 4.3 (Alert).

☐ 2.4 **IF** **Unusual Event** conditions are met,
THEN **GO TO** Enclosure 4.4 (Unusual Event).

☐ 2.5 **IF** An Emergency Classification does **NOT** exist and ERO Activation is desired,
THEN **GO TO** Step 1.6 of Enclosure 4.4 (Unusual Event).

3. Subsequent Actions

NOTE: Actions are **NOT** required to be followed in any particular sequence.

☐ 3.1 **IF** A SBLOCA or Steam Generator Tube Leak exist,
THEN Implement OMP 1-18, (Emergency Worker Exposure Limits).

☐ 3.2 **IF** RIA 46 is on scale,

THEN Use Enclosure 4.3 of RP/0/B/1000/001, (Emergency Classification), to determine if the emergency classification should be upgraded to a Site Area Emergency or General Emergency based on radiation activity.

☐ 3.2.1 Instruct RP to perform an Offsite Dose Calculation and determine any additional Protective Action Recommendations.

☐ 3.3 **IF** 1, 3 RIA 57 reads $\geq$ 1.0 R/hr; 2 RIA 57 reads $\geq$ 1.6 R/hr; or 1, 2, 3 RIA 58 reads $\geq$ 1.0 R/hr.

THEN Use Enclosure 4.1 or 4.8 of RP/0/B/1000/001, (Emergency Classification), to determine if the emergency classification should be upgraded to a Site Area Emergency or General Emergency based on radiation activity.

☐ 3.4 **IF** RIA 16 or 17 are/were in Alert or High Alarm ($\geq$ 2.5 mR/hr),

THEN Instruct RP to perform an Offsite Dose Calculation using the RIA values.

☐ 3.4.1 Use Enclosure 4.3 of RP/0/B/1000/001, (Emergency Classification), and the Offsite Dose Calculation results to determine if the emergency classification should be upgraded to a Site Area Emergency or General Emergency based on dose projection at the site boundary.

☐ 3.4.2 Determine any additional Protective Action Recommendations.

☐ 3.5 **IF** A large scale fire or flood damage has occurred or is occurring,

THEN Use RP/0/B/1000/022, (Procedure For Site Fire Damage Assessment And Repair) and /or RP/0/B/1000/29, (Fire Brigade Response) to determine additional actions that may be required.

☐ 3.6 **IF** A Security Event is in progress,

THEN Use RP/0/B/1000/007, (Security Event), to determine additional actions that may be required.

☐ 3.7 **IF** A hazardous substance has been released,

THEN Use RP/0/B/1000/017, (Spill Response), to determine additional actions that may be required.

NOTE: Priority should be placed on providing treatment for the most life-threatening event (i.e., medical vs radiation exposure - OSC procedure RP/0/B/1000/011, (Planned Emergency Exposure). The Emergency Coordinator may authorize (either verbal or signature) exposures greater than 25 rem TEDE (Total Effective Dose Equivalent) for lifesaving missions.

☐ 3.8 **IF** A medical response is required,

THEN Use RP/0/1000/016, (Medical Response).

☐ 3.8.1 Document verbal approval of Planned Emergency Exposures required for lifesaving missions in the Control Room Emergency Coordinator Log.

☐ 3.9 **IF** Changing plant conditions require an emergency classification upgrade,

THEN **GO TO** the applicable enclosure, designated in the Immediate Actions section of this procedure, required for the appropriate emergency classification.

☐ 3.10 Announce over the Plant Public address System the following information:

☐ 3.10.1 The current emergency classification level and plant status UE/Alert/SAE/GE

☐ 3.10.2 If appropriate, the status of contamination and how people are to handle themselves:

Plant personnel should assume they are contaminated until surveyed by RP or until they have frisked themselves.

NO eating, drinking, or smoking until the area is cleared by RP

Identify areas of contamination to plant personnel:

_____

_____

NOTE:
- The Outside Air Booster Fans (Control Room Ventilation System - CRVS) are used to provide positive pressure in the Control Room to prevent smoke, toxic gases, or radioactivity from entering the area as required by NuReg 0737.
- Chlorine Monitor Alarm will either stop the Air Booster Fans or will not allow them to start.

☐ 3.11 **IF** There is an indication that smoke or toxic gases from the Turbine Building may enter the Control Room.

THEN Instruct Control Room personnel to turn on the Outside Air Booster Fans.

Fans On _____ Time: _____

☐ 3.12 **IF** RIA-39 is in **ALARM**,

THEN Follow AP/1/2/3/1700/018, (Abnormal Release Of Radioactivity).

Fans On _____ Time: _____

☐ Secure fans if back-up sample by RP shows RIA-39 is in error.

☐ Isolate source of airborne contamination to the Control Room if sample from RP shows RIA alarm is valid.

☐ Secure fans if dose levels in CR/TSC/OSC are increased by the addition of outside filtered air.

Fans Off _____ Time: _____

NOTE:
- 10CFR50.54(q) allows for reasonable actions that depart from a License Condition or Technical Specification to be performed in an emergency when this action is immediately needed to protect the health and safety of the public and no action consistent with the License Condition or Technical Specification that can provide adequate or equivalent protection is immediately apparent.
- 10CFR50.54 (y) requires approval of any 10CFR50.54(x) actions by a Licensed Senior Operator
- Implementation of Oconee Severe Accident Guidelines (OSAG) requires the use of 10CFR50.54 (x) and (y) provisions.

☐ 3.13 **IF** Plant conditions require a decision to implement 10CFR50.54(x),

THEN Perform the following steps:

☐ 3.13.1 Document decision and actions taken in the affected unit's log.

☐ 3.13.2 Document decision and actions taken in the CR Emergency Coordinator Log.

NOTE: NRC **must be** notified of any 10CFR50.54(x) decisions and actions within one (1) hour.

☐ 3.13.3 Request CR NRC Communicator to report decision and actions taken to the NRC.

NOTE: 10CFR50.72 requires NRC notification for specific plant conditions.

☐ 3.14 **IF** Plant conditions require NRC notification under 10CFR50.72,

THEN Request the CR NRC Communicator to provide this notification using the guidance in OMP 1-14, (Notifications).

3.15 **IF** The Emergency Response Organization was activated,

THEN Provide turnover to the Technical Support Center using Enclosure 4.5 of this procedure.

Technical Support Center Activated _____ Time: _____

A. Turn over all emergency response procedures in use to the TSC.

3.16 **IF** An Unusual Event classification is being terminated,

THEN **REFER TO** Enclosure 4.6, (Emergency Classification Termination Criteria), of this procedure for termination guidance.

☐ 3.16.1 Verify that the Offsite Communicator has provided termination message to the offsite agencies.

NOTE: The EP Section shall develop a written report, for signature by the Site Vice President, to the State Emergency Preparedness Agency, Oconee County EPD, and Pickens County EPD within 24 working hours of the event termination.

☐ 3.16.2 Notify Emergency Planning Section (Emergency Planning Duty person after hours) that the Unusual Event has been terminated.

☐ 3.16.3 Emergency Planning shall hold a critique following termination of any actual Unusual Event.

4. Enclosures

4.1 General Emergency

4.2 Site Area Emergency

4.3 Alert

4.4 Unusual Event

4.5 Operations Shift Manager to TSC Emergency Coordinator Turnover Sheet

4.6 Emergency Classification Termination Criteria

4.7 Condition A/Condition B Response Actions

4.8 ERO Pager Activation By Security

4.9 References

1. Immediate Actions

NOTE:
- State and County Agencies must be notified of event classification within **15 minutes** of Emergency Declaration.
- Provide Offsite Communicator with declaration time.

☐ 1.1 **IF** It has been determined that an Emergency Action Level for an Initiating Condition has been met,

THEN Declare a **General Emergency**.

Time of Declaration: _____

☐ 1.2 Appoint a person to maintain the Emergency Coordinator Log **OR** maintain the log yourself.

NOTE:
- Remind the Control Room Offsite Communicator that Follow Up notifications (updates) are required at least every **60 Minutes** for this classification.
- Condition A, Dam Failure (Keowee or Jocassee), **OR** Condition B also requires notification of the Georgia Emergency Management Agency and National Weather Service. Remind the Control Room Offsite Communicator to notify these agencies in addition to and after SC State, Oconee County, and Pickens County.

☐ 1.3 Appoint Control Room Offsite Communicator(s).

☐ 1.4 Provide the following Protective Action Recommendations for use by the Offsite Communicator to complete the Emergency Notification Form.

PROTECTIVE ACTION RECOMMENDATION	PICKENS COUNTY SECTORS							OCONEE COUNTY SECTORS						
	A0	A1	B1	C1	A2	B2	C2	A0	D1	E1	F1	D2	E2	F2
EVACUATE	X	X	X	X				X	X	X	X			
SHELTER					X	X	X					X	X	X

1.4.1 **IF** Condition A, Imminent or Actual Dam Failure (Keowee or Jocassee) exists,

THEN **REFER TO** Enclosure 4.7, (Condition A/Condition B Response Actions), Step 1.0, for additional Protective Action Recommendations.

NOTE: Steps 1.6 - 1.13 may be started/completed while the Emergency Notification Form is being prepared by the Offsite Communicator.

☐ 1.5 Review and approve completed Emergency Notification Form.

1.5.1 Sign Emergency Notification Form.

NOTE: Activate the Alternate TSC and OSC in the Oconee Office Building, Rooms 316 and 316A, if a fire in the Turbine Building, flooding conditions, security events, or onsite/offsite hazardous materials spill have occurred or area occurring.

☐ 1.6 Activate the Emergency Response Organization (ERO) by completing the following actions.

1.6.1 Activate ERO Pagers as follows:

NOTE: Flooding/dam failure/earthquake conditions assume bridges may be impassable to reach emergency facilities. Provide the code below for these conditions.

☐ A. **IF** ERO activation for an Emergency (Blue Echo) is required,
THEN Press ERO Pager Activation Panel Button **1**.

☐ B. **IF** ERO activation for an Emergency affecting bridges (Blue Echo Bridges) is required,
THEN Press ERO Pager Activation Panel Button **2**.

☐ C. **IF** ERO activation for a Drill (Blue Delta) is required,
THEN Press ERO Pager Activation Panel Button **3**.

☐ D. **IF** ERO activation for a Drill affecting bridges (Blue Delta Bridges) is required,
THEN Press ERO Pager Activation Panel Button **4**.

☐ E. **IF** Alternate TSC/OSC will be used,
THEN Press ERO Pager Activation Panel Button **5**.

☐ F. **IF** A Security Event is in progress,
THEN Press ERO Pager Activation Panel Button **6**.

☐ 1.6.2 Wait one minute and repeat step 1.6.1.

☐ 1.6.3 Monitor ERO Pager and verify that message has been provided to the ERO.

☐ 1.6.4 Repeat steps 1.6.1 - 1.6.3 if message is not displayed on ERO Pager.

A. **REFER TO** Enclosure 4.8, (ERO Pager Activation By Security), if the ERO Pager is not activated by the completion of Steps 1.6.1 - 1.6.3.

☐ 1.6.5 **IF** ERO activation is after normal working hours,

THEN Contact Security at extension 3636 or 2309.

Security Officer Name _____

A. Request Security Officer to activate the CAN call list.

WARNING: Conducting Site Assembly during a Security Event may not be prudent.

☐ 1.7 Contact the Security Shift Supervisor.

1.7.1 Inform the Security Shift Supervisor that the ERO has been activated.

1.7.2 Discuss the need to conduct Site Assembly.

☐ 1.8 **IF** A Security Event does **NOT** exist,

OR A Security Event does exist and the Security Shift Supervisor agrees,

THEN Conduct Site Assembly per RP/0/B/1000/009, (Procedure For Site Assembly), Enclosure 4.1 and 4.3.

☐ 1.9 **IF** Area Radiation Monitors are in **ALARM**,

OR Steam Line Break has occurred,

THEN Contact shift RP and dispatch onsite monitoring teams.

NOTE:
- Remind the NRC Communicator to complete the NRC Event Notification Worksheet and Plant Status Sheet from OMP 1-14 (Notifications).
- An open line to the NRC may be required.

☐ 1.10 Appoint a SRO to notify the NRC immediately after notification of the Offsite Agencies but not later than **one (1) hour** after declaration of the emergency.

1.10.1 NRC Communicator (SRO) Name _____

NOTE: The NRC Communicator is responsible for activating ERDS.

☐ 1.10.2 Start the Emergency Response Data System (ERDS) for unit(s) involved within **one (1) hour** of the emergency classification.

A. **REFER TO** RP/0/B/1000/003A, (ERDS Operation).

☐ 1.11 Evacuate all non-essential personnel from the site after personnel accountability has been reached.

1.11.1 **REFER TO** RP/0/B/1000/010, (Procedure For Emergency Evacuation/ Relocation Of Site Personnel).

☐ 1.12 **IF** Condition A, Imminent or Actual Dam Failure (Keowee or Jocassee),

OR Condition B (Keowee) exists,

THEN **REFER TO** Enclosure 4.7, (Condition A/Condition B Response Actions), Step 2.0 or 3.0, for additional response actions.

☐ 1.13 Notify the Unit Operations Coordinator/Duty person of emergency status.

☐ 1.14 Return to Step 3.0, (Subsequent Actions), of this procedure.

1. Immediate Actions

NOTE:
- State and County Agencies must be notified of event classification within **15 minutes** of Emergency Declaration.
- Provide Offsite Communicator with declaration time.

☐ 1.1 **IF** It has been determined that an Emergency Action Level for an Initiating Condition has been met,

THEN Declare a **Site Area Emergency**.

Time of Declaration: _____

☐ 1.2 Appoint a person to maintain the Emergency Coordinator Log **OR** maintain the log yourself.

NOTE:
- Remind the Control Room Offsite Communicator that Follow Up notifications (updates) are required at least every **60 Minutes** for this classification.
- Condition A, Dam Failure (Keowee or Jocassee), **OR** Condition B also requires notification of the Georgia Emergency Management Agency and National Weather Service. Remind the Control Room Offsite Communicator to notify these agencies in addition to and after SC State, Oconee County, and Pickens County.

☐ 1.3 Appoint Control Room Offsite Communicator(s).

☐ 1.4 Provide the Protective Action Recommendations from Enclosure 4.7, (Condition A/ Condition B Response Actions), Step 1.0, for use by the Offsite Communicator if a Condition A, Imminent or Actual Dam Failure, exists.

NOTE: Steps 1.6 - 1.12 may be started/completed while the Emergency Notification Form is being prepared by the Offsite Communicator.

☐ 1.5 Review and approve completed Emergency Notification Form.

1.5.1 Sign Emergency Notification Form.

NOTE: Activate the Alternate TSC and OSC in the Oconee Office Building, Rooms 316 and 316A, if a fire in the Turbine Building, flooding conditions, security events, or onsite/offsite hazardous materials spill have occurred or area occurring.

☐ 1.6 Activate the Emergency Response Organization (ERO) by completing the following actions.

1.6.1 Activate ERO Pagers as follows:

NOTE: Flooding/dam failure/earthquake conditions assume bridges may be impassable to reach emergency facilities. Provide the code below for these conditions.

☐ A. **IF** ERO activation for an Emergency (Blue Echo) is required,
THEN Press ERO Pager Activation Panel Button **1**.

☐ B. **IF** ERO activation for an Emergency affecting bridges (Blue Echo Bridges) is required,
THEN Press ERO Pager Activation Panel Button **2**.

☐ C. **IF** ERO activation for a Drill (Blue Delta) is required,
THEN Press ERO Pager Activation Panel Button **3**.

☐ D. **IF** ERO activation for a Drill affecting bridges (Blue Delta Bridges) is required,
THEN Press ERO Pager Activation Panel Button **4**.

☐ E. **IF** Alternate TSC/OSC will be used,
THEN Press ERO Pager Activation Panel Button **5**.

☐ F. **IF** A Security Event is in progress,
THEN Press ERO Pager Activation Panel Button **6**.

☐ 1.6.2 Wait one minute and repeat step 1.6.1.

☐ 1.6.3 Monitor ERO Pager and verify that message has been provided to the ERO.

☐ 1.6.4 Repeat steps 1.6.1 - 1.6.3 if message is not displayed on ERO Pager.

A. **REFER TO** Enclosure 4.8, (ERO Pager Activation By Security), if the ERO Pager is not activated by the completion of Steps 1.6.1 - 1.6.3.

☐ 1.6.5 **IF** ERO activation is after normal working hours,
THEN Contact Security at extension 3636 or 2309.

Security Officer Name _____

A. Request Security Officer to activate the CAN call list.

WARNING: Conducting Site Assembly during a Security Event may not be prudent.

☐ 1.7 Contact the Security Shift Supervisor.

1.7.1 Inform the Security Shift Supervisor that the ERO has been activated.

1.7.2 Discuss the need to conduct Site Assembly.

☐ 1.8 **IF** A Security Event does **NOT** exist,
OR A Security Event does exist and the Security Shift Supervisor agrees,
THEN Conduct Site Assembly per RP/0/B/1000/009, (Procedure For Site Assembly), Enclosure 4.1 and 4.3.

☐ 1.9 **IF** Area Radiation Monitors are in **ALARM**,
OR Steam Line Break has occurred,
THEN Contact shift RP and dispatch onsite monitoring teams.

NOTE:
- Remind the NRC Communicator to complete the NRC Event Notification Worksheet and Plant Status Sheet from OMP 1-14 (Notifications).
- An open line to the NRC may be required.

☐ 1.10 Appoint an SRO to notify the NRC immediately after notification of the Offsite Agencies but not later than **one (1) hour** after declaration of the emergency.

1.10.1 NRC Communicator (SRO) Name_____

NOTE: The NRC Communicator is responsible for activating ERDS.

☐ 1.10.2 Start the Emergency Response Data System (ERDS) for unit(s) involved within **one (1) hour** of the emergency classification.

A. **REFER TO** RP/0/B/1000/003A, (ERDS Operation).

☐ 1.11 **IF** Condition A, Imminent or Actual Dam Failure (Keowee or Jocassee),

OR Condition B (Keowee) exists,

THEN **REFER TO** Enclosure 4.7, (Condition A/Condition B Response Actions), Step 2.0 or 3.0, for additional response actions.

☐ 1.12 Notify the Unit Operations Coordinator/Duty person of emergency status.

☐ 1.13 Return to Step 3.0, (Subsequent Actions), of this procedure.

1. Immediate Actions

NOTE:
- State and County Agencies must be notified of event classification within **15 minutes** of Emergency Declaration.
- Provide Offsite Communicator with declaration time.

☐ 1.1 **IF** It has been determined that an Emergency Action Level for an Initiating Condition has been met,

THEN Declare an **Alert**.

Time of Declaration: _____

☐ 1.2 Appoint a person to maintain the Emergency Coordinator Log **OR** maintain the log yourself.

NOTE:
- Remind the Control Room Offsite Communicator that Follow Up notifications (updates) are required at least every **60 minutes** for this classification.
- Condition B for Keowee Hydro Project Dams/Dikes also requires notification of the Georgia Emergency Management Agency and National Weather Service. Remind the Control Room Offsite Communicator to notify these agencies in addition to and after SC State, Oconee County, and Pickens County.

☐ 1.3 Appoint Control Room Offsite Communicator(s).

NOTE: Steps 1.5 - 1.11 may be started/completed while the Emergency Notification Form is being prepared by the Offsite Communicator.

☐ 1.4 Review and approve completed Emergency Notification Form.

1.4.1 Sign Emergency Notification Form.

NOTE: Activate the Alternate TSC and OSC in the Oconee Office Building, Rooms 316 and 316A, if a fire in the Turbine Building, flooding conditions, security events, or onsite/offsite hazardous materials spill have occurred or area occurring.

☐ 1.5 Activate the Emergency Response Organization (ERO) by completing the following actions.

1.5.1 Activate ERO Pagers as follows:

NOTE: Flooding/dam failure/earthquake conditions assume bridges may be impassable to reach emergency facilities. Provide the code below for these conditions.

☐ A. **IF** ERO activation for an Emergency (Blue Echo) is required,
THEN Press ERO Pager Activation Panel Button **1.**

☐ B. **IF** ERO activation for an Emergency affecting bridges (Blue Echo Bridges) is required,
THEN Press ERO Pager Activation Panel Button **2.**

☐ C. **IF** ERO activation for a Drill (Blue Delta) is required,
THEN Press ERO Pager Activation Panel Button **3.**

☐ D. **IF** ERO activation for a Drill affecting bridges (Blue Delta Bridges) is required,
THEN Press ERO Pager Activation Panel Button **4.**

☐ E. **IF** Alternate TSC/OSC will be used,
THEN Press ERO Pager Activation Panel Button **5.**

☐ F. **IF** A Security Event is in progress,
THEN Press ERO Pager Activation Panel Button **6.**

☐ 1.5.2 Wait one minute and repeat step 1.5.1.

☐ 1.5.3 Monitor ERO Pager and verify that message has been provided to the ERO.

☐ 1.5.4 Repeat steps 1.5.1 - 1.5.3 if message is not displayed on ERO Pager.

A. **REFER TO** Enclosure 4.8, (ERO Pager Activation By Security), if the ERO Pager is not activated by the completion of Steps 1.5.1 - 1.5.3.

☐ 1.5.5 **IF** ERO activation is after normal working hours,
THEN Contact Security at extension 3636 or 2309.

Security Officer Name _____

A. Request Security Officer to activate the CAN call list.

WARNING: Conducting Site Assembly during a Security Event may not be prudent.

☐ 1.6 Contact the Security Shift Supervisor.

1.6.1 Inform the Security Shift Supervisor that the ERO has been activated.

1.6.2 Discuss the need to conduct Site Assembly.

☐ 1.7 **IF** A Security Event does **NOT** exist,
OR A Security Event does exist and the Security Shift Supervisor agrees,
THEN Conduct Site Assembly per RP/0/B/1000/009, (Procedure For Site Assembly), Enclosure 4.1 and 4.3.

☐ 1.8 **IF** Area Radiation Monitors are in **ALARM**,
OR Steam Line Break has occurred,
THEN Contact shift RP and dispatch onsite monitoring teams

NOTE:
- Remind the NRC Communicator to complete the NRC Event Notification Worksheet and Plant Status Sheet from OMP 1-14 (Notifications).
- An open line to the NRC may be required.

☐ 1.9 Appoint an SRO to notify the NRC immediately after notification of the Offsite Agencies but not later than **one (1) hour** after declaration of the emergency.

1.9.1 NRC Communicator (SRO) Name _____

NOTE: The NRC Communicator is responsible for activating ERDS.

☐ 1.9.2 Start the Emergency Response Data System (ERDS) for unit(s) involved within **one (1) hour** of the emergency classification.

A. **REFER TO** RP/0/B/1000/003A, (ERDS Operation).

☐ 1.10 **IF** Condition B at Keowee exists,

THEN **REFER TO** Enclosure 4.7, (Condition A/Condition B Response Actions), Step 3.0, for additional response actions.

☐ 1.11 Notify the Unit Operations Coordinator/Duty person of emergency status.

☐ 1.12 Return to Step 3.0, (Subsequent Actions), of this procedure.

1. Immediate Actions

NOTE:
- State and County Agencies must be notified of event classification within **15 minutes** of Emergency Declaration.
- Provide Offsite Communicator with declaration time.

☐ 1.1 **IF** It has been determined that an Emergency Action Level for an Initiating Condition has been met,

THEN Declare an **Unusual Event**.

Time of Declaration: _____

☐ 1.2 Appoint a person to maintain the Emergency Coordinator Log **OR** maintain the log yourself.

NOTE:
- Remind the Control Room Offsite Communicator that an Initial Message and a Termination Message are required for this classification. No Follow Up Notifications (updates) are required unless requested by the Offsite Agencies.
- Condition B for Keowee Hydro Project Dams/Dikes also requires notification of the Georgia Emergency Management Agency and National Weather Service. Remind the Control Room Offsite Communicator to notify these agencies in addition to and after SC State, Oconee County, and Pickens County.

☐ 1.3 Appoint Control Room Offsite Communicator(s).

NOTE: Steps 1.5 - 1.11 may be started/completed while the Emergency Notification Form is being prepared by the Offsite Communicator.

☐ 1.4 Review and approve completed Emergency Notification Form.

1.4.1 Sign Emergency Notification Form.

☐ 1.5 **IF** Condition B at Keowee exists,

THEN **REFER TO** Enclosure 4.7, (Condition A/Condition B Response Actions), Step 3.0, for additional response actions.

NOTE:
- Activation of the ERO is **NOT** required for an Unusual Event Classification.
- Activate the Alternate TSC and OSC in the Oconee Office Building, Rooms 316 and 316A, if a fire in the Turbine Building, flooding conditions, security events, or onsite/ offsite hazardous materials spills have occurred or are occurring.

☐ 1.6 **IF** Emergency Response Organization (ERO) activation is desired,
THEN Complete the following actions.

1.6.1 Activate ERO Pagers as follows:

NOTE: Flooding/dam failure/earthquake conditions assume bridges may be impassable to reach emergency facilities. Provide the code below for these conditions.

☐ A. **IF** ERO activation for an Emergency (Blue Echo) is required,
THEN Press ERO Pager Activation Panel Button **1**.

☐ B. **IF** ERO activation for an Emergency affecting bridges (Blue Echo Bridges) is required,
THEN Press ERO Pager Activation Panel Button **2**.

☐ C. **IF** ERO activation for a Drill (Blue Delta) is required,
THEN Press ERO Pager Activation Panel Button **3**.

☐ D. **IF** ERO activation for a Drill affecting bridges (Blue Delta Bridges) is required,
THEN Press ERO Pager Activation Panel Button **4**.

☐ E. **IF** Alternate TSC/OSC will be used,
THEN Press ERO Pager Activation Panel Button **5**.

☐ F. **IF** A Security Event is in progress,
THEN Press ERO Pager Activation Panel Button **6**.

☐ 1.6.2 Wait one minute and repeat step 1.6.1.

☐ 1.6.3 Monitor ERO Pager and verify that message has been provided to the ERO.

☐ 1.6.4 Repeat steps 1.6.1 - 1.6.3 if message is not displayed on ERO Pager.

A. **REFER TO** Enclosure 4.8, (ERO Pager Activation By Security), if the ERO Pager is not activated by the completion of Steps 1.6.1 - 1.6.3.

☐ 1.6.5 **IF** ERO activation is after normal working hours,

THEN Contact Security at extension 3636 or 2309.

Security Officer Name _____

A. Request Security Officer to activate the CAN call list.

WARNING: Conducting Site Assembly during a Security Event may not be prudent.

☐ 1.7 Contact the Security Shift Supervisor.

1.7.1 Inform the Security Shift Supervisor that the ERO has been activated.

1.7.2 Discuss the need to conduct Site Assembly.

NOTE: Consider conducting a Site Assembly if a Hazardous Materials spill affecting personnel safety is involved; or, if personnel safety is a concern.

☐ 1.8 **IF** The Emergency Response Organization is needed to assist with the Unusual Event emergency activities,

AND A Security Event does **NOT** exist,

OR A Security Event does exist and the Security Shift Supervisor agrees,

THEN Conduct Site Assembly per RP/0/B/1000/009, (Procedure For Site Assembly), Enclosure 4.1 and 4.3.

☐ 1.8.1 Document the decision to conduct Site Assembly in the Control Room Emergency Coordinator Log.

☐ 1.9 **IF** Area Radiation Monitors are in **ALARM**,

OR Steam Line Break has occurred,

THEN Contact shift RP and dispatch onsite monitoring teams.

NOTE:
- Remind the NRC Communicator to complete the NRC Event Notification Worksheet and Plant Status Sheet from OMP 1-14 (Notifications).
- An open line to the NRC may be required.

☐ 1.10 Appoint an SRO to notify the NRC immediately after notification of the Offsite Agencies but not later than **one (1) hour** after declaration of the emergency.

1.10.1 NRC Communicator (SRO) Name_____

☐ 1.11 Notify the Unit Operations Coordinator/Duty person of emergency status.

☐ 1.12 Return to Step 3.0, (Subsequent Actions), of this procedure.

Enclosure 4.5

Operations Shift Manager To TSC Emergency Coordinator Turnover Sheet

EMERGENCY CLASSIFICATION _____ TIME DECLARED _____
DESCRIPTION OF EVENT _____
_____

Unit One Status:

Reactor Power _____ RCS Pressure _____ RCS Temperature _____
Auxiliaries Being Supplied Power From _____ ES Channels Actuated _____

MAJOR EQUIPMENT OUT OF SERVICE _____
_____
_____
_____

JOBS IN PROGRESS_____
_____
_____

Unit Two Status:

Reactor Power _____ RCS Pressure _____ RCS Temperature _____
Auxiliaries Being Supplied Power From _____ ES Channels Actuated _____

MAJOR EQUIPMENT OUT OF SERVICE _____
_____
_____
_____

JOBS IN PROGRESS_____
_____
_____

Unit Three Status:

Reactor Power _____ RCS Pressure _____ RCS Temperature _____
Auxiliaries Being Supplied Power From _____ ES Channels Actuated _____

MAJOR EQUIPMENT OUT OF SERVICE _____
_____
_____
_____

JOBS IN PROGRESS_____
_____
_____

Enclosure 4.5

Operations Shift Manager To TSC Emergency Coordinator Turnover Sheet

Classification Procedure in Use:

RP/0/B/1000/002 (Control Room Emergency Coordinator Procedure)

Is RP/0/B/1000/03A, (ERDS Operation) in use? Yes ____ No ____ If Yes, Unit No. ____

Step No. ____

Is RP/0/B/1000/007, (Security) in use? Yes ____ No ____ If Yes, Step No. ____

Is RP/0/B/1000/016, (Medical) in use? Yes ____ No ____ If Yes, Step No. ____

Is RP/0/B/1000/017, (Spill Response) in use? Yes ____ No ____ If Yes, Step No. ____

Is RP/0/B/1000/022, (Fire/Flood) in use? Yes ____ No ____ If Yes, Step No. ____

Is RP/0/B/1000/029, (Fire Brigade) in use? Yes ____ No ____ If Yes, Step No. ____

Is OMP 1-18 (Emergency Worker Exposure Limits) in use? Yes ____ No ____

If yes, implementation of emergency worker exposure limits must be announced over Public Address System. {1}

IF Condition A, Dam Failure, has been declared for Keowee Hydro Project,

THEN Provide the following information to the TSC Emergency Coordinator:

- Status of Offsite Agency Notifications _____
- Recommendations made to offsite agencies _____
- Status of relocation of site personnel _____

What is the status of Site Assembly? (This question is only applicable for those times that the Emergency Response Organization is activated after hours, holidays, or weekends.)

_____

_____

_____

Next message due to Offsite Agencies at Time: _____

Operations Shift Manager/CR _____ Time: _____

Emergency Coordinator/TSC _____ Time: _____

Enclosure 4.6

Emergency Classification Termination Criteria

IF The following guidelines **applicable to the present emergency condition** have been met or addressed,

THEN An emergency condition may be considered resolved when:

_____ 1. Existing conditions no longer meet the existing emergency classification criteria and it appears unlikely that conditions will deteriorate further.

_____ 2. Radiation levels in affected in-plant areas are stable or decreasing to below acceptable levels.

_____ 3. Releases of radioactive material to the environment greater than Technical Specifications are under control or have ceased.

_____ 4. The potential for an uncontrolled release of radioactive material is at an acceptably low level.

_____ 5. Containment pressure is within Technical Specification requirements.

_____ 6. Long-term core cooling is available.

_____ 7. The shutdown margin for the core has been verified.

_____ 8. A fire, flood, earthquake, or similar emergency condition is controlled or has ceased.

_____ 9. Offsite power is available per Technical Specification requirements.

_____ 10. All emergency action level notifications have been completed.

_____ 11. The Area Hydro Manager has been notified of termination of Condition B for Keowee Hydro Project.

- **REFER TO** Section 6 of the Emergency Telephone Directory, (Keowee Hydro Project Dam/Dike Notification).

_____ 12. The Regulatory Compliance Section has evaluated plant status with respect to Technical Specifications and recommends Emergency classification termination.

_____ _____ 13. Emergency terminated. Request the Control Room Offsite Communicator to complete an Emergency Notification Form for a Termination Message using guidance in RP/0/1000/015A, (Offsite Communications From The Control Room), and provide information to offsite agencies.

Date/Time Initial

- Return to Step 3.16.1.

1. Condition A Response - Immediate Actions

☐ 1.1 **IF** Condition A, Imminent or Actual Dam Failure (Keowee or Jocassee) exists,

THEN Perform the following actions:

☐ 1.1.1 Provide the following **protective action recommendations** to Oconee County and Pickens County for imminent/actual dam failure.

A. Provide the following recommendation for Emergency Notification Form Section 15 (B) Evacuate:

1. Move residents living downstream of the Keowee Hydro Project dams to higher ground.

B. Provide the following recommendation for Emergency Notification Form Section 15 (D) Other:

1. Prohibit traffic flow across bridges identified on your inundation maps until the danger has passed.

☐ 1.2 Return to applicable Enclosure (4.1 or 4.2).

☐ 1.2.1 **IF** A General Emergency has been declared,

THEN **GO TO** Step 1.5 of Enclosure 4.1, (General Emergency).

☐ 1.2.2 **IF** A Site Area Emergency has been declared,

THEN **GO TO** Step 1.5 of Enclosure 4.2, (Site Area Emergency).

2. Condition A Response - Subsequent Actions

☐ 2.1 Notify the Duke Power System Coordinator (Systems Operation Center) on the Control Room Dispatcher phone and provide information related to the event.

☐ 2.2 Relocate Keowee personnel to the Operational Support Center (OSC) if events occur where their safety could be affected.

☐ 2.2.1 **IF** Keowee personnel are relocated to the OSC,

THEN Notify the Duke Power System Coordinator (Systems Operation Center) on the Control Room Dispatcher phone.

NOTE: A loss of offsite communications capabilities (Selective Signaling and the Wide Area Network - WAN) could occur within 1.5 hours after Keowee Hydro Dam failure. Rerouting of the Fiber Optic Network through Bad Creek should be started **as soon as possible**.

☐ 2.3 Notify Telecommunications Group in Charlotte to begin rerouting the Oconee Fiber Optic Network.

2.3.1 **REFER TO** Selective Signaling Section of the Emergency Telephone Directory (page 9).

☐ 2.4 Request Security to alert personnel at the Security Track/Firing Range and Building 8055 (Warehouse #5) to relocate to work areas inside the plant.

NOTE:
- Plant access road to the Oconee Complex could be impassable within **1.5 hours** if the Keowee Hydro Dam fails. A loss of the Little River Dam (Newry Dam) or Dikes A-D will take longer to affect this road.
- PA Announcements can be made by the Control Room using the Office Page Override feature or Security.

☐ 2.5 Make a PA Announcement to relocate personnel at the following locations to the World Of Energy/Operations Training Center.

_____ Oconee Complex

_____ Oconee Garage

_____ Oconee Maintenance Training Facility

☐ 2.6 Dispatch operators to the SSF and establish communications.

☐ 2.7 Return to applicable Enclosure (4.1 or 4.2).

☐ 2.7.1 **IF** A General Emergency has been declared,
THEN **GO TO** Step 1.13 of Enclosure 4.1, (General Emergency).

☐ 2.7.2 **IF** A Site Area Emergency has been declared,
THEN **GO TO** Step 1.12 of Enclosure 4.2, (Site Area Emergency).

3. Condition B Response - Immediate Actions

☐ 3.1 **IF** Condition B at Keowee exists,

THEN Notify the Area Hydro Manager.

3.1.1 **REFER TO** Section 6 of the Emergency Telephone Directory, (Keowee Hydro Project Dam/Dike Notification).

☐ 3.2 Return to applicable Enclosure (4.1, or 4.2, or 4.3, or 4.4).

☐ 3.2.1 **IF** A General Emergency has been declared,

THEN **GO TO** Step 1.13 of Enclosure 4.1, (General Emergency).

☐ 3.2.2 **IF** A Site Area Emergency has been declared,

THEN **GO TO** Step 1.12 of Enclosure 4.2, (Site Area Emergency).

☐ 3.2.3 **IF** An Alert has been declared,

THEN **GO TO** Step 1.11 of Enclosure 4.3, (Alert).

☐ 3.2.4 **IF** An Unusual Event has been declared,33333

THEN **GO TO** Step 1.6 of Enclosure 4.4, (Unusual Event).

1. Symptoms

1.1 Activation of the ERO Pagers using the ERO Pager Activation Panel in the TSC was unsuccessful.

2. Immediate Actions

2.1 Activate the Emergency Response Organization (Technical Support Center, Operational Support Center, and Emergency Operations Facility) by completing the following actions.:

2.1.1 Contact Security.

A. Dial 3636 (Dial 2309 if no response is received).

Security Officer Name _____

2.1.2 Read the following information to the Security Officer:

A. The Emergency Response Organization (Technical Support Center, Operational Support Center, and Emergency Response Facility) is being activated for an emergency relating to Unit # _____.

NOTE: Activate the Alternate TSC and OSC in the Oconee Office Building, Rooms 316 and 316A, if a fire in the Turbine Building, flooding conditions, security events, or onsite/ offsite hazardous materials spills have occurred or are occurring.

B. _____ Primary TSC/OSC will be used

OR

_____ Alternate TSC/OSC will be used

C. This is a _____ Blue Delta (Drill) activation

OR

This is a _____ Blue Echo (Emergency) activation

NOTE: Flooding/dam failure/earthquake conditions assume bridges may be impassable to reach emergency facilities. Provide the code below for these conditions.

D. This is a _____ Blue Delta Bridges (Drill) activation

OR

This is a _____ Blue Echo Bridges (Emergency) activation

1. PIP 01-01395

(R06-97)

INFORMATION ONLY

Duke Power Company
PROCEDURE PROCESS RECORD

(1) ID No. RP/0/B/1000/019

Revision No 009

PREPARATION

Station Oconee Nuclear Station

(3) Procedure Title Technical Support Center Emergency Coordinator Procedure

(4) Prepared By Donice Kelley Date: 06/04/2001

(5) Requires 10CFR50.59 evaluation?

- ☐ Yes (New procedure or revision with major changes)
- ☒ No (Revision with minor changes)
- ☐ No (To incorporate previously approved changes)

(6) Reviewed By Rodney Brown (QR) Date 6/4/01

Cross-Disciplinary Review By _____ (QR)NA NA Date _____

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

(7) Additional Reviews

QA Review By _____ Date _____

Reviewed By _____ Date _____

Reviewed By _____ Date _____

(8) Temporary Approval *(if necessary)*

By _____ (SRO/QR) Date _____

By _____ (QR) Date _____

(9) Approved By Ray Waterman for MDT Date 6/5/01

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 Listed 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	Procedure No. RP/0/B/1000/019
Technical Support Center Emergency Coordinator Procedure	Revision No. 009
Reference Use	Electronic Reference No. OX002WPG

Technical Support Center Emergency Coordinator Procedure

NOTE: This procedure is an implementing procedure to the Oconee Nuclear Site Emergency Plan and must be forwarded to Emergency Planning within three (3) working days of approval.

1. Symptoms

1.1 Conditions exist where events are in progress or have occurred which indicate a potential degradation in the level of safety of the plant and activation of the Emergency Response Organization has been initiated.

2. Immediate Actions

NOTE:
- Enclosure 4.2 contains listing of abbreviations/acronyms.
- Actions in Sections 2.0 and 3.0 **are NOT** required to be followed in any particular sequence.
- Place keeping aids: ☐ at left of steps may be used for procedure place keeping (☑). Major events are required to be documented in the TSC Emergency Coordinator Log.

☐ 2.1 Establish the Technical Support Center as operational by doing the following:

☐ 2.1.1 Use the attached Enclosure 4.3, (TSC Personnel Log Sheets) for sign-in by all personnel reporting to the TSC. Assign responsibility to the TSC Log Keeper.

☐ 2.1.2 Ensure **Names** are also listed on the TSC Personnel Status Board in the TSC

NOTE: The TSC **must** assume turnover from the Control Room within **75 minutes** of the initiating Emergency Classification time.

☐ 2.1.3 Determine the following minimum staff requirements for TSC activation.

	NAME
Emergency Coordinator	_____
Dose Assessment Liaison	_____
Nuclear Engineering	_____
Offsite Communicator	_____
Tech Assistant to EC	_____

☐ 2.1.4 Verify that the phone system is operational or make other provisions for communications.

☐ 2.1.5 Verify that the OSC is Operational.

☐ 2.1.6 Verify that a log of TSC actions and activities has been started.

☐ 2.1.7 **IF** Activation of the Alternate TSC is required prior to completion of turnover with the OSM.

THEN **REFER TO** Step 1.0 of Enclosure 4.6, (Alternate TSC/OSC Activation).

☐ 2.2 Receive turnover from the Operations Shift Manager using Enclosure 4.1, (Operations Shift Manager To TSC Emergency Coordinator Turnover Sheet)

TSC and OSC Activated Time _____

☐ 2.3 Determine the status of Site Accountability from the TSC Offsite Communicator.

☐ 2.3.1 Request the TSC/OSC Liaison to have a **Search & Rescue Team** dispatched from the OSC if personnel within the Protected Area have not been accounted for by their group.

☐ 2.4 Verify that the electronic status board is set up and that someone is available to maintain it.

☐ 2.5 Discuss any off-site radiological concerns with the TSC Dose Assessment Liaison.

☐ 2.6 Announce the following over the TSC/OSC Public Address System:

☐ 2.6.1 The current Emergency Classification level and plant status.

☐ 2.6.2 "Anyone who has consumed alcohol within the past five (5) hours notify either the Emergency Coordinator in the TSC or the OSC Manager in the OSC."

☐ 2.6.3 "Personnel should assume that areas are contaminated until surveyed by RP."

☐ 2.6.4 "No eating, drinking, or smoking until the TSC and OSC are cleared by RP."

☐ 2.7 Turn office page over ride switch **ON**, and dial **70** on the Emergency Coordinator's phone.

2.7.1 Announce the following information over the Plant Public Address System:

Drill Message:

Attention all site personnel. This is *(name)*. I am the Emergency Coordinator. This is a drill. This is a drill.

You have been assembled as a part of an emergency exercise. The simulated emergency conditions are _____

If this was a real emergency, you would be asked to remain assembled waiting on further information, or given instructions to leave the site in accordance with our site evacuation plan. At this time, however, we will continue with the emergency exercise and you may now return to your normal work assignments. I repeat.... you may now return to your normal work assignments.

Thank you for your participation.

Emergency Message:

Attention all site personnel. This is *(name)*. I am the Emergency Coordinator. This is an emergency message.

At the present time we have a(n) _____ emergency classification. The plant status is as follows _____.

Please remain at your site assembly location until you receive further instructions. Information will be provided to you as conditions change.

☐ 2.8 Contact the State Director Emergency Planning at the SEOC.

	NAME	TELEPHONE NUMBERS
SDEP	_____	1(803) 737-8564

IF The SEOC has not been activated,

THEN Contact the County Directors of Emergency Planning (CDEP) to discuss plant status.

Oconee CDEP	_____	1(864) 638-4200
Pickens CDEP	_____	1(864) 898-5943

☐ 2.9 Perform the following concurrently.

- Use Step 2.10 for emergency classification.
- Use Step 2.11 for turnover to the EOF Director.
- Use steps in 3.0 for tasks that must continue regardless of emergency classification.

(Step 2.10 on next page)

☐ 2.10 Review emergency classification and verify that it meets the criteria of RP/0/B/1000/001 (Emergency Classification). Discuss changing plant conditions with the Superintendent of Operations. Discuss emergency classification prior to making recommendations.

☐ 2.10.1 **IF** An **Unusual Event Classification** exists,

THEN Initiate the following actions:

☐ A. Notify counties/state within 15 minutes of event classification.

NOTE:
- Remind the TSC NRC Communicator to complete the NRC Event Notification Worksheet and Plant Status Sheet prior to contacting the NRC.
- NRC should be notified immediately after notification of Offsite Agencies **but NOT** later than **one (1) hour** after declaration of the emergency.

☐ B. Notify NRC of event classification

NOTE: Condition B for Keowee Hydro Project Dams/Dikes also requires notification of the Georgia Emergency Management Agency and National weather service. Remind the TSC Offsite Communicator to notify these agencies in addition to and after SC State, Oconee County, and Pickens County.

☐ C. **IF** Condition B at Keowee exists,

THEN Notify the Area Hydro Manager (refer to Section 6 of the Emergency Telephone Directory, Keowee Hydro Project Dam/Dike Notification).

☐ D. Discuss classification with SDEP and CDEP

	NAME	TELEPHONE NUMBERS
SDEP	_____	1(803) 737-8564
Oconee CDEP	_____	1(864) 638-4200
Pickens CDEP	_____	1(864) 898-5943

(Unusual Event Classification guidance continued on next page)

☐ E. **IF** An Unusual Event classification is being terminated

THEN **REFER TO** Enclosure 4.5, (Emergency Classification Termination Criteria) of this procedure for termination guidance.

NOTE: The EP Section shall develop a written report, for signature by Site Vice President, to the State Emergency Preparedness Agency, Oconee County EPD, and Pickens County EPD within 24 working hours of the event termination.

☐ 1. Notify Emergency Planning that the Unusual Event has been terminated.

☐ 2. Emergency Planning shall hold a critique following termination of the Unusual Event.

(Step 2.10.2, Alert Classification on next page)

☐ 2.10.2 **IF** An Alert Classification exists,

THEN Initiate the following actions:

☐ A. Notify counties/state within 15 minutes of event classification

☐ B. Follow Up Notifications (updates) are required a minimum of every 60 minutes

- Significant changes in plant status should be communicated to offsite agencies as they occur

☐ C. Notify NRC of change in classification

☐ D. Start ERDS (TSC NRC Communicator - RP/0/B/1000/003A, ERDS Operation)

☐ E. Discuss change in classification with the State Director of Emergency Preparedness (SDEP) and County Directors of Emergency Preparedness (CDEP)

	NAME	TELEPHONE NUMBERS
SDEP	_____	1(803) 737-8564

1. **IF** The SEOC has not been activated,

   THEN Contact the CDEP to discuss plant status.

Oconee CDEP	_____	1(864) 638-4200
Pickens CDEP	_____	1(864) 898-5943

NOTE: Condition B for Keowee Hydro Project Dams/Dikes also requires notification of the Georgia Emergency Management Agency and National Weather Service. Remind the TSC Offsite Communicator to notify these agencies in addition to and after SC State, Oconee County, and Pickens County. {2}

☐ F. **IF** Condition B at Keowee exists,

THEN Notify the Area Hydro Manager (refer to Section 6 of the Emergency Telephone Directory, Keowee Hydro Project Dam/Dike Notification).

(Step 2.10.3, Site Area Emergency Classification on next page)

☐ 2.10.3 **IF** A Site Area Emergency Classification exists,

THEN Initiate the following actions:

☐ A. Notify counties/state within 15 minutes of event classification

☐ B. **IF** Condition A, Dam Failure (Keowee or Jocassee) exists,

THEN Make the following protective action recommendations to Oconee County and Pickens County for imminent/actual dam failure and include on the Emergency Notification Form under Section 15 (B) and (D):

1. Move residents living downstream of the Keowee Hydro Project dams to higher ground.

2. Prohibit traffic flow across bridges identified on your inundation maps until the danger has passed.

☐ C. Follow Up Notifications (updates) are required a minimum of every 60 minutes

1. Significant changes in plant status should be communicated to offsite agencies as they occur

☐ D. Notify NRC of change in classification

☐ E. Start ERDS (TSC NRC Communicator - RP/0/B/1000/003A, ERDS Operation)

☐ F. Discuss change in classification with SDEP and CDEP

NAME	TELEPHONE NUMBERS
SDEP _____	1(803) 737-8564

1. **IF** The SEOC has not been activated,

THEN Contact the CDEP to discuss plant status.

Oconee CDEP _____ 1(864) 638-4200

Pickens CDEP _____ 1(864) 898-5943

☐ G. **IF** Condition A, Dam Failure (Keowee or Jocassee) exists,

THEN **REFER TO** Step 3.1.

NOTE: Condition B for Keowee Hydro Project Dams/Dikes also requires notification of the Georgia Emergency Management Agency and National Weather Service. Remind the TSC Offsite Communicator to notify these agencies in addition to and after SC State, Oconee County, and Pickens County. {2}

☐ H. **IF** Condition B at Keowee exists,

THEN Notify the Area Hydro Manager (refer to Section 6 of the Emergency Telephone Directory, Keowee Hydro Project Dam/Dike Notification).

(Step 2.10.4, General Emergency Classification, on next page)

2.10.4 **IF** A **General Emergency Classification** exists,

THEN Initiate the following actions:

☐ A. Evacuate 2 mile radius and 5 miles downwind **unless** conditions make evacuation dangerous. Shelter all sectors not evacuated. Request the TSC Dose Assessment Liaison to determine the actual sectors affected.

☐ B. **IF** Condition A, Dam Failure (Keowee or Jocassee) exists,

THEN Make the following protective action recommendations to Oconee County and Pickens County for imminent/actual dam failure and include on the Emergency Notification Form under Section 15B and D:

1. Move residents living downstream of the Keowee Hydro Project dams to higher ground.

2. Prohibit traffic flow across bridges identified on your inundation maps until the danger has passed.

☐ C. Notify counties/state within 15 minutes of event classification

☐ D. Follow Up Notifications (updates) are required a minimum of every 60 minutes

1. Significant changes in plant status should be communicated to offsite agencies as they occur

☐ E. Notify NRC of change in classification

☐ F. Start ERDS (TSC NRC Communicator - RP/0/B/1000/003A, ERDS Operation)

☐ G. Discuss change in classification and Protective Action Recommendations with SDEP and/or CDEP. Provide any known information concerning conditions that would make evacuation dangerous.

	NAME	TELEPHONE NUMBERS
SDEP	_____	1(803) 737-8564

1. **IF** The SEOC has not been activated,

THEN Contact the CDEP to discuss plant status.

Oconee CDEP	_____	1(864) 638-4200
Pickens CDEP	_____	1(864) 898-5943

☐ H. **IF** Condition A, Dam Failure (Keowee or Jocassee) exists,

THEN **REFER TO** Step 3.1.

NOTE: Condition B for Keowee Hydro Project Dams/Dikes also requires notification of the Georgia Emergency Management Agency and National Weather Service. Remind the TSC Offsite Communicator to notify these agencies in addition to and after SC State, Oconee County, and Pickens County. {2}

☐ I. **IF** Condition B at Keowee exists,

THEN Notify the Area Hydro Manager (refer to Section 6 of the Emergency Telephone Directory, Keowee Hydro Project Dam/Dike Notification).

(Step 2.11 on next page)

☐ 2.11 When notified by the EOF Director that the Emergency Operations Facility (EOF) is operational, notify the following TSC personnel to exchange information with their counterpart in the EOF.

TSC Dose Assessment Liaison
TSC Offsite Communicator
Control Room/EOF Liaison (Operations Network)

NOTE: EOF Director will notify the Emergency Coordinator when the information has been received and establish a time for turnover. Turnover should be initiated **as soon as possible**. A goal of 30 minutes should be used to complete turnover after the EOF is declared *Operational*. {1}

☐ 2.11.1 Obtain the current copy of the Emergency Notification Form and plant status. The EOF Director shall provide to the Emergency Coordinator the information he has been provided with in the following areas:

- Present Emergency Classification _____ Time ____

  Initial Emergency Classification _____ Time ____
- Initiating Condition/Unit affected
- Present status of affected unit(s), including significant equipment out of service

  Improving ____ Stable __ Degrading ___
- Status of unaffected unit(s):

  Unit 1 shutdown at _____ or at ____% power

  Unit 2 shutdown at _____ or at ____% power

  Unit 3 shutdown at _____ or at ____% power
- Emergency Releases: NO _____

  Airborne ____ Liquid ____ Is occurring ____ Has occurred ____ Time _____
  Normal Operating Limits: Below ___ Above ___
  Protective Action Recommendations
- Site Evacuation NO ____ YES ____ If yes, location _____

  Time of evacuation _____
- Last Message Number ____ Next Message due at ___

☐ 2.11.2 Emergency Coordinator turnover to EOF Director complete.

EOF Activated _____ Time ____

☐ 2.11.3 Request NRC Communicator to notify the NRC EOC that the EOF is activated.

3. Subsequent Actions

3.1 **IF** Condition A, Dam Failure (Keowee or Jocassee) exists,

THEN Perform the following actions:

☐ 3.1.1 Notify the Duke Power System Coordinator (System Operations Center) and provide information related to the event. Refer to Section 6 of the Emergency Telephone Directory.

☐ 3.1.2 Relocate Keowee personnel to the Operational Support Center if events occur where their safety could be affected.

☐ 3.1.3 Notify the Duke Power System Coordinator if Keowee personnel are relocated to the OSC.

NOTE: A loss of offsite communications capabilities (Selective Signaling and the WAN) could occur within 1.5 hours after Keowee Hydro Dam failure. Rerouting of the Fiber Optic Network through Bad Creek should be started **AS SOON AS POSSIBLE**.

☐ 3.1.4 **IF** The EOF **is NOT** activated,

THEN Notify Telecommunications Group in Charlotte to begin rerouting the Oconee Fiber Optic Network. Refer to Selective Signaling Section of the Emergency Telephone Directory (page 9).

☐ 3.1.5 Notify Security to alert personnel at the Security Track/Firing Range and Warehouse #5 to relocate to work areas inside the plant.

☐ 3.1.6 Relocate personnel at the following locations to the World of Energy/Operations Training Center:

NOTE: Plant access road to the Oconee Complex could be impassable within 1.5 hours if the Keowee Hydro Dam fails. A loss of the Little River Dam or Dikes A-D will take longer to affect this road.

____ Oconee Complex

____ Oconee Garage

____ Oconee Maintenance Training Facility

☐ 3.1.7 Ensure Operations has dispatched operators to the SSF and established communications.

☐ 3.2 Periodically evaluate with TSC personnel the need to conduct evacuation. Log the status of this action on the TSC Status Board.

NOTE:
- Twenty-four (24) hour staffing **must be** accomplished prior to personnel being evacuated from the site. RP/0/B/1000/010, (Procedure for Emergency Evacuation/Relocation of Site Personnel).
- Determine if personnel with special radiological exposure limits need to be evacuated (e.g.; declared pregnant women, personnel with radio-pharmaceutical limitations).

3.2.1 Consider the following for making Site Evacuation decisions:

- Alert - determined by actual plant conditions
- Site Area Emergency - consider evacuation/relocation of non-essential site personnel. World of Energy personnel should be evacuated at the same time as non-essential personnel.
- General Emergency - evacuate all non-essential personnel. Notify the EOF Director to evacuate the World of Energy.
- Notify the EOF anytime personnel are relocated on site or evacuated from the site.

☐ 3.3 Periodically evaluate the need to operate the outside air booster fans (Control Room Pressurization and Filter System - CRVS) with TSC personnel. Log status of this system on the TSC Status Board.

NOTE:
- Outside air booster fans are used to provide positive pressure in the Control Room/TSC/OSC to prevent smoke, toxic gas, or radioactivity from entering the area as required by NUREG 0737, Control Room Habitability.
- Chlorine Monitor Alarm will either stop the outside air booster fans **OR** will not allow them to start.

☐ 3.3.1 **IF** Smoke/toxic gas in the Turbine Building or Auxiliary Building is expected to reach the Control Room,

THEN Instruct the Control Room to turn **ON** the outside air booster fans.

Fans On ____ Time_____

☐ A. Request OSC to verify operability of the Control Room Ventilation System per AP/1,3/A/1700/018, (Abnormal Release of Radioactivity).

3.3.2 **IF** RIA-39 is in **Alarm**

THEN Verify that the Control Room has turned on the outside air booster fans.

☐ A. Request OSC to verify operability of the Control Room Ventilation System per AP/1,3/A/1700/018, (Abnormal Release of Radioactivity).

☐ B. Request backup air sample from the OSC to verify RIA alarm

☐ C. **IF** Air sample determines that RIA-39 alarm is not valid,

THEN Secure outside air booster fans.

☐ D. **IF** Air sample determines that RIA-39 alarm is valid,

THEN Isolate the source of airborne contamination to the Control Room/TSC/OSC

☐ E. **IF** Dose levels in the Control Room/TSC/OSC are being increased by the addition of outside filtered air,

THEN Secure outside air booster fans.

Fans Off _____ Time _____

☐ 3.4 Periodically evaluate the need to activate the Alternate TSC and/or OSC.

3.4.1 **IF** Activation of the Alternate TSC and/or OSC is required,

THEN **REFER TO** Step 2.0 of Enclosure 4.6, (Alternate TSC/OSC Activation).

3.4.2 Notify the EOF Director once relocation to the Alternate TSC is completed.

NOTE: The NRC will send a response team to the site at a Site Area or General Emergency Classification.

☐ 3.5 **IF** An NRC team is enroute,

THEN Perform the following steps:

☐ 3.5.1 Notify Alternate Emergency Coordinator to report to the TSC for an update on plant conditions.

A. Record Alternate Emergency Coordinator's name on Enclosure 4.4 (NRC Site Team Response Form).

B. Brief Alternate Emergency Coordinator on current plant conditions.

☐ 3.5.2 Provide Enclosure 4.4 (NRC Site Team Response Form), to the TSC NRC Communicator.

A. Instruct TSC NRC Communicator to complete Steps 1.2 – 1.5 of Enclosure 4.4 (NRC Site Team Response Form).

☐ 3.5.3 Notify OSC Manager and request RP Manager and Security to implement actions required to process NRC Site Team.

☐ 3.6 Provide periodic updates to the EOFD concerning plant status. Request the EOFD to provide dose assessment and field monitoring data to the TSC on a periodic basis.

3.6.1 **IF** Failed Fuel Condition Three (3) has been determined,

THEN Immediately notify the EOFD.

A. Failed Fuel Condition Three (3) requires additional Protective Action Recommendations.

☐ 3.7 Authorize exposure greater than normal operating limits for planned equipment repair missions and/or emergency lifesaving missions.

3.7.1 Approval may be either verbal or written.

3.7.2 This authority may be delegated to the RP Manager in the OSC.

☐ 3.8 Update TSC and OSC personnel approximately every 30 minutes on the Emergency Classification and plant status via the TSC/OSC public address system. (Timer is available in the Emergency Procedures Cart)

☐ 3.9 Establish twenty-four (24) hour staffing and have the Managers prepare as needed.

3.9.1 TSC Personnel Log Sheets (Enclosure 4.3) are to be used for this purpose.

NOTE: Long term use of the SFP as a makeup source will deplete the SFP inventory. Engineering has evaluated and approved the following method for refilling of the SFP with filtered lake water.

☐ 3.10 **IF** Offsite fire apparatus is needed to provide water to the Spent Fuel Pool,

THEN Request the EOFD to contact the Oconee CDEP to provide sufficient fire apparatus (at least 3 pumper trucks of 1000 gpm, or greater capacity) to Oconee Nuclear Site (If available, Keowee Ebenezer, Corinth Shiloh, or Keowee Key Rural Volunteer Fire Departments should be requested to provide support).

☐ 3.10.1 Provide the OSC Manager with the following information and request support from the OSC:

- Fire apparatus is being dispatched from Oconee County to provide water to the Spent Fuel Pool
- Request Security Liaison to have Security Officers meet the fire apparatus at the determined site entrance
- Request Maintenance Manager to initiate MP/0/A/3009/012A (Emergency Plan For Refilling Spent Fuel Pool).

NOTE:
- 10CFR50.54(x) allows for reasonable actions that depart from a License Condition or Technical Specification to be performed in an emergency when this action is immediately needed to protect the health and safety of the public and no action consistent with the License Condition or Technical Specification that can provide adequate or equivalent protection is immediately apparent.
- 10CFR50.54(y) requires approval of any 10CFR50.54(x) actions by a Licensed Senior Operator.
- Implementation of Oconee Severe Accident Guidelines (OSAG) requires the use of 10CFR50.54 (x) and (y) provisions.

☐ 3.11 **IF** Plant conditions require a decision to implement 10CFR50.54(x),

THEN Perform the following steps:

☐ 3.11.1 Obtain approval of a Licensed Senior Reactor Operator prior to taking any action.

☐ 3.11.2 Document decision and actions taken in the affected units log.

☐ 3.11.3 Document decision and actions taken in the Control Room Emergency Coordinator Log.

NOTE: NRC **must be** notified of any 10CFR50.54(x) decisions and actions within one (1) hour.

☐ 3.11.4 Request Control Room/TSC NRC Communicator to report decision and actions taken to the NRC.

NOTE: 10CFR50.72 requires NRC notification for specific plant conditions.

☐ 3.12 **IF** Plant conditions require NRC notification under 10CFR50.72,

THEN Request the Control Room/TSC NRC Communicator to provide this notification using the guidance in OMP 1-14, (Notifications).

☐ 3.13 **IF** A LOCA exists inside containment,

THEN Initiate the following actions:

3.13.1 Request the Operations Superintendent to have Operations personnel refer to OP/1,2,3/A/1102/023, (Operation Of Containment Hydrogen Recombiner System).

3.13.2 Request the Operations Superintendent to have Operations personnel refer to OP/0/A/1104/019 (Control Room Ventilation System).

☐ 3.14 Establish a Recovery Organization (Section M of the ONS Emergency Plan, Volume A, located in the Operations Shift Manager's office) once the emergency has been terminated.

3.14.1 Request the OSC Manager to review Section M of the Emergency Plan (Volume 17A is located in Unit 3 Control Room) to begin preparation for recovery.

3.15 Emergency Planning Section shall be responsible for completing all Procedure Process Records of Emergency Plan Implementing procedures initiated by the TSC.

4. Enclosures

4.1 Operations Shift Manager to TSC Emergency Coordinator Turnover Sheet

4.2 Emergency Preparedness Acronyms

4.3 TSC Personnel Log

4.4 NRC Site Team Response Form

4.5 Emergency Classification Termination Criteria

4.6 Alternate TSC/OSC Activation

4.7 References

Enclosure 4.1

Operations Shift Manager To TSC Emergency Coordinator Turnover Sheet

EMERGENCY CLASSIFICATION _____ TIME DECLARED _____

DESCRIPTION OF EVENT _____

_____

Unit One Status:

Reactor Power _____ RCS Pressure _____ RCS Temperature _____
Auxiliaries Being Supplied Power From _____ ES Channels Actuated _____
MAJOR EQUIPMENT OUT OF SERVICE _____

_____

JOBS IN PROGRESS_____

_____

Unit Two Status:

Reactor Power _____ RCS Pressure _____ RCS Temperature _____

Auxiliaries Being Supplied Power From _____ ES Channels Actuated _____

MAJOR EQUIPMENT OUT OF SERVICE _____

_____

JOBS IN PROGRESS_____

_____

Unit Three Status:

Reactor Power _____ RCS Pressure _____ RCS Temperature _____
Auxiliaries Being Supplied Power From _____ ES Channels Actuated _____
MAJOR EQUIPMENT OUT OF SERVICE _____

_____

JOBS IN PROGRESS_____

_____

Enclosure 4.1

Operations Shift Manager To TSC Emergency Coordinator Turnover Sheet

Classification Procedure in Use:

RP/0/B/1000/002 Control Room Emergency Coordinator Procedure

Is RP/0/B/1000/003A, ERDS Operation, in use? Yes _____ No _____ If Yes, Unit No. _____

Step No. _____

Is RP/0/B/1000/007, (Security), in use? Yes _____ No _____ If Yes, Step No. _____

Is RP/0/B/1000/016, (**Medical**), in use? Yes _____ No _____ If Yes, Step No. _____

Is RP/0/B/1000/017, (Spill Response), in use? Yes _____ No _____ If Yes, Step No. _____

Is RP/0/B/1000/022, (Fire/Flood), in use? Yes _____ No _____ If Yes, Step No. _____

Is RP/0/B/1000/29, (Fire Brigade) in use? Yes _____ No _____ If Yes, Step No. _____

Is OMP 1-18 (Emergency Worker Exposure Limits) in use? Yes _____ No _____

If yes, implementation of emergency worker exposure limits must be announced over Public Address System. {3}

IF Condition A, Dam Failure, has been declared for Keowee Hydro Project,

THEN provide the following information to the TSC Emergency Coordinator:

- Status of Offsite Agency Notifications _____
- Recommendations made to offsite agencies _____
- Status of relocation of site personnel _____

What is the status of Site Assembly? (This question is only applicable for those times that the Emergency Response Organization is activated after hours, holidays, or weekends.)

_____

_____

Next message due to Offsite Agencies at Time: _____

Operations Shift Manager/CR _____ Time: _____

Emergency Coordinator/TSC _____ Time: _____

Enclosure 4.2

Emergency Preparedness Acronyms

CDEP	County Director of Emergency Preparedness
EC	Emergency Coordinator
EOF	Emergency Operations Facility
EOFD	Emergency Operation, Facility Director
ETS	Emergency Telephone System
LEC	Law Enforcement Center
NRC	Nuclear Regulatory Commission
EOC	Emergency Operations Center
OSC	Operational Support Center
PAR	Protective Action Recommendation
SCC	State/County Communicator
SDEP	State Director of Emergency Preparedness
SEOC	State Emergency Operations Center
SWP	State Warning Point
TSC	Technical Support Center

TSC Personnel Log

DATE: _____

PRIMARY					RELIEF		
POSITION	NAME (Last, First, MI)	SOCIAL SECURITY / EMPLOYEE ID	TIME IN AT TSC	SHIFT SCHEDULE	NAME (Last, First, MI)	SOCIAL SECURITY / EMPLOYEE ID	SHIFT SCHEDULE
Emergency Coordinator**							
Offsite Communicator**							
Dose Assessment Liaison*							
Nuclear Engineering**							
Tech Assist to EC (Mech Engineer)**							
Operations Superintendent							
TSC/OSC Liaison							

*45 Minute Responder
** 75 Minute Responder

PRIMARY					RELIEF		
POSITION	NAME (Last, First, MI)	SOCIAL SECURITY / EMPLOYEE ID	TIME IN AT TSC	SHIFT SCHEDULE	NAME (Last, First, MI)	SOCIAL SECURITY / EMPLOYEE ID	SHIFT SCHEDULE
TSC/OSC Liaison Support							
Engineering Manager							
NRC Communicator (ENS)							
Dose Assessors							
Primary Systems Engineer							
Secondary Systems Engineer							
Emergency Planning							
Community Relations (WOE)							
Local I/T							

1. NRC Site Team Response Form

1.1 Alternate Emergency Coordinator _____
(name)

1.2 NRC Site Team Personnel Information:

NAME	SOCIAL SECURITY NUMBER
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

1.3 Estimated Time of Arrival (ETA): _____

1.4 Mode of Transportation: _____

Access Gate (Circle One): Hwy 130 - Main Station/WOE Entrance (Gate 1)

Hwy 183 - Intake Owner Controlled Area (OCA) Gate (Gate 3)

Hwy 183 - Complex/Branch OCA Gate (Gate 4)

1.5 Telecopy this form to the OSC and Security using Speed Dial Code 031 or One-Touch Dial Code 31.

1.6 GET and BBA Requirements Waived:

RP Manager _____ Date _____

Enclosure 4.5

Emergency Classification Termination Criteria

IF The following guidelines applicable to the present emergency condition have been met or addressed,

THEN An emergency condition may be considered resolved when:

☐ 1.1 Existing conditions no longer meet the existing emergency classification criteria and it appears unlikely that conditions will deteriorate further.

☐ 1.2 Radiation levels in affected in-plant areas are stable or decreasing to below acceptable levels.

☐ 1.3 Releases of radioactive material to the environment greater than Technical Specifications are under control or have ceased.

☐ 1.4 The potential for an uncontrolled release of radioactive material is at an acceptably low level.

☐ 1.5 Containment pressure is within Technical Specification requirements.

☐ 1.6 Long-term core cooling is available.

☐ 1.7 The shutdown margin for the core has been verified.

☐ 1.8 A fire, flood, earthquake, or similar emergency condition is controlled or has ceased.

☐ 1.9 Offsite power is available per Technical Specification requirements.

☐ 1.10 All emergency action level notifications have been completed.

☐ 1.11 The Area Hydro Manager has been notified of termination of Condition B for Keowee Hydro Project.

☐ 1.12 The Regulatory Compliance Section has evaluated plant status with respect to Technical Specifications and recommends Emergency Classification termination.

Date/Initial/Time

☐ 1.13 Emergency terminated. Request the TSC Offsite Communicator to complete an Emergency Notification Form for a Termination Message using guidance in RP/0/B/1000/015B, (Offsite Communications From The Technical Support Center), and provide information to offsite agencies.

- Return to Step 2.10.1.E.1

1. Activation of the Alternate TSC prior to completion of turnover with the OSM

☐ 1.1 Request OSC Manager/SPOC Supervisor to initiate steps to setup the Alternate TSC located in RP/0/B/1000/25 (OSC Manager Procedure).

☐ 1.2 Request TSC Logkeeper (or designee) to announce over the plant PA that the Alternate TSC is being activated.

☐ 1.3 Relocate TSC personnel, except for the following, to the Alternate TSC, Room 316 of the Oconee Office Building:

- ☐ 1.3.1 TSC Offsite Communicator (1)
- ☐ 1.3.2 TSC Logkeeper
- ☐ 1.3.3 Emergency Planning (if available)

☐ 1.4 Return to Step 2.2 of this procedure and complete turnover with the OSM.

- ☐ 1.4.1 Report to the Alternate TSC with remaining support personnel after completion of turnover.

2. Activation of the Alternate TSC/OSC

☐ 2.1 Direct the TSC/OSC Liaison to inform the OSC Manager of the need to relocate the following emergency response facilities:

_____ TSC

_____ OSC

_____ TSC and OSC

☐ 2.2 Provide guidance on best available route to personnel being relocated to the Alternate TSC.

2.2.1 **IF** A radiological release is in progress,

THEN Direct the TSC/OSC Liaison to request RP to determine the best available route to the Alternate TSC.

☐ 2.3 Direct the following TSC personnel to report to the Alternate TSC to assist with setup of the facility and establish communications with the TSC:

_____ (1) TSC Offsite Communicator

_____ (1) Dose Assessor

_____ Ops Superintendent Assistant

_____ TSC/OSC Liaison Technical Assistant

☐ 2.4 Direct the TSC NRC Communicator to inform the NRC that the Alternate TSC is being activated.

☐ 2.5 Direct the remaining TSC personnel to report to the Alternate TSC.

☐ 2.6 Inform the EOF Director that the Alternate TSC is being activated and that TSC personnel, including the Emergency Coordinator, are enroute to that facility.

☐ 2.7 Return to Step 3.4.2 of this procedure after reporting to the Alternate TSC.

1. PIP O-98-04996
2. PIP O-99-00743
3. PIP 01-01395