A.2 EMERGENCY PLAN IMPLEMENTING PROCEDURES
LIST OF CURRENT PAGES

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000 Series	Organization	
A.2-001	Emergency Organization	7
100 Series	Activation	
A.2-101	Classification of Emergencies	6
A.2-102	Notification of an Unusual Event	4
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A.2-104	Site Area Emergency	3
A.2-105	General Emergency	4
A.2-106	Activation of Technical Support Center	4
A.2-107	Activation of Operations Support Center	6
A.2-108	Access Control During Emergencies	0
200 Series	Assessment	
A.2-201	On-Site Monitoring and Protective Action Criteria	3
A.2-202	Off-Site Monitoring During an Emergency	1
A.2-203	Deleted 3-1-82	
A.2-204	Off-Site Protective Action Recommendations	3
A.2-205	Personnel Accountability	2
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A.2-207	Sampling Priorities During an Emergency	0
A.2-208	Core Damage Assessment	0
A.2-209	Responsibilities of Radiological Emergency Coordinator	0
300 Series	Protective Actions	
A.2-301	Emergency Evacuation	2
A.2-302	Assembly Point Activation	3
A.2-303	Search and Rescue	3
A.2-304	Thyroid Prophylaxis	3
400 Series	Radiological Surveillance and Control	
A.2-401	Emergency Exposure Control	2
A.2-402	Contamination Control	2
A.2-403	In-Plant Emergency Surveys	3
A.2-404	Airborne Iodine Sampling and Analysis	3
A.2-405	Release Rate Determination	3
A.2-406	Off-Site Dose Projection	7
A.2-407	Personnel and Vehicle Monitoring	2
A.2-408	Sample Coordination During an Emergency	1
A.2-409	Self-Contained Breathing Apparatus (SCBA) Use During An Emergency	0
A.2-410	Out-of-Plant Surveys	2
A.2-411	Establishment of Secondary Access Control	1
A.2-412	Deleted 1-6-83	
A.2-413	Small Volume Liquid Sample Obtained at the Post Accident Sampling System	1
A.2-414	Large Volume Liquid Sample and/or Dissolved Gas Sample Obtained at Post Accident Sampling System	1
A.2-415	Containment Gas Sample Obtained at Post Accident Sampling System	2

A.2 EMERGENCY PLAN IMPLEMENTING PROCEDURES
LIST OF CURRENT PAGES

PROCEDURE	PROCEDURE TITLE	REVISION NUMBER
400 Series	Radiological Surveillance and Control (Cont'd.)	
A.2-416	Containment Iodine and Particulate Samples Obtained at Post Accident Sampling System	2
A.2-417	Draining the Trap, Sump and Collector of Post Accident Sampling System	1
A.2-418	Post Accident Sampling Station Demin Water Tank Fill Procedure	0
A.2-419	Liquid Radiochemical Analysis	1
A.2-420	Containment Atmosphere Radiochemical Analysis	0
A.2-421	Containment Atmosphere Iodine/Particulate Analysis	0
A.2-422	Stack Iodine/Particulate Sampling & Analysis	1
A.2-423	Reactor Building Vents Iodine/Particulate Sampling and Analysis	1
A.2-424	EOF Count Room Counting Procedure	0
A.2-425	Post-Accident Gas Sample Line Heat Trace	0
500 Series	Communications and Documentation	
A.2-501	Communication During an Emergency	1
A.2-502	Recordkeeping During an Emergency	0
A.2-503	Deleted - 04/28/83	
600 Series	Re-Entry and Recovery	
A.2-601	Re-Entry	0
A.2-602	Deleted 11-19-81	
A.2-603	Deleted 5/19/83	
700 Series		
A.2-702	Response to an Emergency at Prairie Island	3
A.2-703	Response to Off-Site Situation Involving Radioactive Materials	0

Op. Com. Rev. Req'd. Yes X No ___
Q.A. Review Req'd. Yes ___ No X
ALARA Review Req'd. Yes ___ No X

CLASSIFICATION OF EMERGENCIES

A.2-101

Prepared by: C S Mathieson ALARA Review: Revision 0 Date 03/31/81
Reviewed by: J W Winchell Q.A. Review: Revision 0 Date 03/31/81
Operations Committee Final Review: Meeting Number 1226 Date 09/22/83
Approved by: D C Verusio Date 9/28/83
Op. Com. Results Review: Not Required Mtg. # 946 Date 03/20/81

PURPOSE

The purpose of this procedure is to specify conditions or groups of conditions that indicate an emergency exists and the actions to be taken by the Operations personnel to verify and classify the type of emergency condition.

CONDITIONS AND PREREQUISITES

An off-normal condition corresponding to one of the initiating events described in the appendices of this procedure is occurring or has occurred.

PRECAUTIONS

A. There are many indications of an emergency condition that may occur either individually, in group events or sequentially. The operator must be careful not to rely on any one indication as being absolutely indicative of an emergency condition. Although the operator should believe indications and take action based on those indications, he shall attempt to verify indications by checking secondary or coincident indicators. Continued surveillance and assessment of plant conditions is necessary to ensure that the emergency classification is appropriately revised as conditions change, or as more definitive information is obtained.

B. None of the actions specified in the EPIP's shall take precedence over the actions that are necessary to comply with Technical Specifications.

ORGANIZATION

A. Overall Responsibility - Emergency Director

B. In Charge

Control Room - Site Superintendent

WP/kk

C. Assistance

Reactor Operator
Shift Technical Advisor when assigned
Shift Emergency Communicator

DISCUSSION

A. Definitions

1. Emergency Condition - An occurrence, or combination of events and indications that fall into one of the following classifications:

a. Notification of Unusual Event

Unusual 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 off-site response or monitoring are expected unless further degradation of safety systems occurs.

b. 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.

c. SITE AREA EMERGENCY

Events are in process or have occurred which involve actual or likely major failures of plant functions needed for protection of the public. Any releases are not expected to exceed EPA Protective Action Guideline exposure levels except near site boundary.

d. 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 Guideline exposure levels off-site for more than the immediate site area.

2. Emergency Action Levels (EAL) - Numerical or qualitative values for the operational or radiological parameters, (radiological dose rates; water borne or surface deposited concentrations of radioactivity; specific instrument indications or changes in indications) that may be used as threshholds for initiating procedures or actions to assess and verify plant conditions and may require initiating specific emergency procedures as designated by a particular class of emergency.

B. Recognition

Attached to this procedure is Attachment 2, Event Recognition Guidelines (1-30). These guidelines identify the four emergency classifications, the possible initiating event(s), emergency action levels for each classification, and, where applicable, specific instruments and indications to be used to detect and classify an emergency. The identified instruments and alarms are a representative listing of various instruments that may be used to verify an emergency condition. There are many process variables referred to in the guidelines.

The instruments, indications, or alarms listed for any particular event are not necessarily a complete list of all those that will show abnormal indications or be useful in classifying the event. There is typically more than one instrument or instrument channel that monitors a specific parameter. The redundant channels and coincident indicators should all be used to verify the emergency condition.

The emergency action levels specified in the guidelines do not necessitate initiation of any particular phase of the emergency plan but rather signify a need for assessment and classification of conditions. In many cases, the proper classification will be immediately apparent from in-plant instrumentation. In others, further assessment is necessary to determine the applicable emergency classification.

The plant operating staff should consider the effect that combinations of initiating events have, that if taken individually would constitute a lower emergency classification but collectively may exceed the criteria for a higher classification.

In the Unusual Event classification, numerous EALs are related to limiting conditions for operation (LCOs) as specified in Technical Specifications. In these cases, the EAL is not considered exceeded and an emergency condition does not exist if the appropriate corrective action for exceeding the LCO is taken. The EAL is exceeded and an Unusual Event has occurred if the event results in a forced shutdown by the LCO.

RESPONSIBILITIES

A. Emergency Director (Site Superintendent)

1. Prior to EOF activation, the Emergency Director shall declare the appropriate emergency condition as soon as the event has been indicated and verified.

   After EOF activation, the Emergency Director shall notify the Emergency Manager when change in classification is indicated and verified.

2. After the emergency condition has been declared, the Emergency Director is responsible for implementing the actions as specified in the following procedures:

   a. Notification of an Unusual Event, A.2-102
   b. Alert, A.2-103
   c. Site Area Emergency, A.2-104
   d. General Emergency, A.2-105

B. Control Room Operator

1. The control room operator shall immediately notify the Site Superintendent of any events that may be classified as emergency conditions.

2. The operator shall attempt to verify any indications.

3. The operator shall assist the Site Superintendent in assessing the indications and determining the classification of emergency.

4. The operator shall take immediate actions as dictated by plant procedures and his general knowledge to control the event and place the plant in a safe condition.

C. Shift Technical Advisor

The Shift Technical Advisor shall advise the Site Superintendent in identifying the event.

D. Shift Emergency Communicator

The Shift Emergency Communicator shall assist the Site Superintendent in event classification.

PROCEDURE

STEP 1: Verify the initial indication by comparing the indication to redundant instrument channels or to related parameters, physical observations, and field reports, as applicable.

STEP 2: If the situation is clearly an emergency at this point and the SEC is likely asleep in the SEC Trailer, contact the SEC and instruct the SEC to make initial notifications to the State and Counties from the SEC Trailer. (These notifications shall be made within 15 minutes of emergency declaration.)

Summon the STA and the SEC, if not already notified.

STA: DELETED

SEC: DELETED

STEP 3: Use Attachment 1 to identify any Guidelines applicable to the initiating condition.

STEP 4: Locate the applicable guideline sheets in Attachment 2.

STEP 5: Determine the appropriate emergency classification by comparing the verified plant parameters to the EALs for each emergency condition. If more than one guideline is applicable to the initiating condition, use the guideline which indicates the most severe classification.

Initiate Form 5790-101-1, EMERGENCY CLASSIFICATION CHECKLIST (Attachment 3).

STEP 6 If the EOF is not activated, declare the appropriate emergency and implement the corresponding response procedure. If the EOF is activated, contact the Emergency Manager for consultation on whether or not to change the emergency classification. If a change is to be made, implement the corresponding procedure. (The Emergency Manager will declare the new classification.)

a. Notification of Unusual Event, A.2-102
b. Alert, A.2-103
c. Site Area Emergency, A.2-104
d. General Emergency, A.2-105

STEP 7: Continue to assess the events and, if necessary, the emergency classification, as more definitive information becomes available or if plant conditions change significantly.

REFERENCES

1. NSP Monticello Nuclear Generating Plant, Plant Emergency Plan

2. NUREG-0654/FEMA-REP 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plan and Preparedness in Support of Nuclear Power Plants"

3. Title 10, Code of Federal Regulation Part 50, Appendix E

ATTACHMENTS

1. Attachment 1, List of Initating Condition Categories
2. Attachment 2, Guidelines for Classification of Emergency Conditions
3. Example of Emergency Classification Checklist

WP/kk

Attachment 1
List of Initiating Condition Categories

Initiating Condition	Guideline
Radioactive effluents-high release rate or unmonitored	1
Increase in plant radiation levels	2
Release or loss of control of radioactive material within plant	2
Fuel handling accident	2
Reactor pressure high	3
Reactor coolant leak	4
Main steam line break	5
Fuel cladding degradation	6
High coolant or off-gas activity	6
FSAR transient (Control Rod Drop)	6
Safety relief valve failure	7
ECCS initiation	8
Loss of primary containment	10
Loss of engineered safety or fire protection features	11
Failure of RPS to initiate or complete scram	12
Loss of plant shutdown or shutdown cooling capability	13
Loss of indicators or alarms (annunciators)	14
Control room evacuation	15
Toxic or flammable gas	16
Security compromise	17
Loss of AC power	18
Loss of DC power	19
Tornado or sustained winds	20
Flood or low water	21
Earthquake	22
Fire	23
Explosion	24
Aircraft or missiles	25
Train accident	26

WP/kk

Attachment 1 (Cont'd.)

List of Initiating Condition Categories

Initiating Condition	Guideline
Contaminated injury	26
Turbine failure	26
General emergency	28
Other plant conditions	29
Spent fuel, major damage to	30

WP/kk

ATTACHMENT 2

Guideline 1 — RADIOACTIVE EFFLUENT

UNUSUAL EVENT

Radiological effluent technical specification limits exceeded.

EAL's

1. Discharge Canal Monitor exceeds 20 cps.

   (High alarm annunciated on C04-A-22, DISCHARGE CANAL RADIATION, and recorded by C02-17.358)

   or

2. Unmonitored liquid release to river which exceeds 10CFR20 App. B limits.

   or

3. Stack Effluent Monitor (Ch A or B) exceeds 90,000 µCi/sec.

   (Hi-Hi alarm annunciated on C259-A-1, STACK EFFLUENT HI-HI RADIATION; recorded on C257 and C258 (RR 7858A and RR 7858B), STACK NOBLE GAS RELEASE RATE; and alarmed by computer point D-061.)

   or

4. Reactor Building Vent Noble Gas Monitor exceeds 4500 µCi/sec.

   or

5. Unmonitored gaseous release to the atmosphere which is estimated or suspected to exceed Appendix I Tech. Spec. limits.

ALERT

Radiological effluents greater than 10 times technical specification instantaneous limits (an instantaneous rate which, if continued over 2 hours, would result in about 1 mR at the site boundary under average meteorological conditions).

EAL's

1. Discharge Canal Monitor exceeds 200 cps.

   or

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 1 (Cont'd.) RADIOACTIVE EFFLUENT

2. Unmonitored liquid release to river which is 10 times the limits in 10CFR20 Appendix B.

or

3. Stack Effluent Monitor (Ch A or B) exceeds 9.0E+5 µCi/sec.

or

4. Reactor Building Vent Noble Gas Monitor exceeds 45,000 µCi/sec.

or

5. Unmonitored gaseous release to the atmosphere which is estimated or expected to exceed 10 times Appendix I Tech Spec limits.

SITE AREA

a. Effluent monitors detect levels corresponding to greater than 50 mR/hr for ½ hour or greater than 500 mR/hr Whole Body for two minutes (or five times these levels to the thyroid) at the site boundary for adverse meteorology,

b. These dose rates are projected based on other plant parameters (e.g., radiation level in containment with leak rate appropriate for existing containment pressure) or are measured in the environs; or

c. EPA Protective Action Guidelines are projected to be exceeded outside the Site Boundary.

EAL's

1. Stack Effluent Monitor (Ch A or B) exceeds 9.0E+5 µCi/sec for 30 minutes

or

2. Stack Effluent Monitor (Ch A or B) exceeds 9.0E+6 µCi/sec for 2 minutes

or

3. Stack release rate of radioiodines exceeds 1.7E+4 µCi/sec for 30 minutes

or

4. Stack release rate of radioiodines exceeds 1.7E+5 µCi/sec for 2 minutes

or

5. RBV Noble Gas Monitor exceeds 2.1E+4 µCi/sec for 30 minutes

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 1 (Cont'd.) RADIOACTIVE EFFLUENT

or

6. RBV Noble Gas Monitor exceeds 2.1E+5 µCi/sec for 2 minutes.

or

7. RBV release rate of radioiodines exceeds 2100 µCi/sec for 30 minutes

or

8. RBV release rate of radioiodines exceeds 2.1E+4 µCi/sec for 2 minutes

or

9. Whole body doses greater than 1 Rem or thyroid doses of greater than 5 Rem are projected beyond the site boundary.

or

10. Containment Radiation Monitor reading indicates above the .01% curve when plotted versus time after shutdown on the graph shown in Figure 1.

or

11. Measured W.B. dose rates at site boundary or beyond exceed 50 mR/hr for 30 minutes or 500 mR/hr for 2 minutes

or

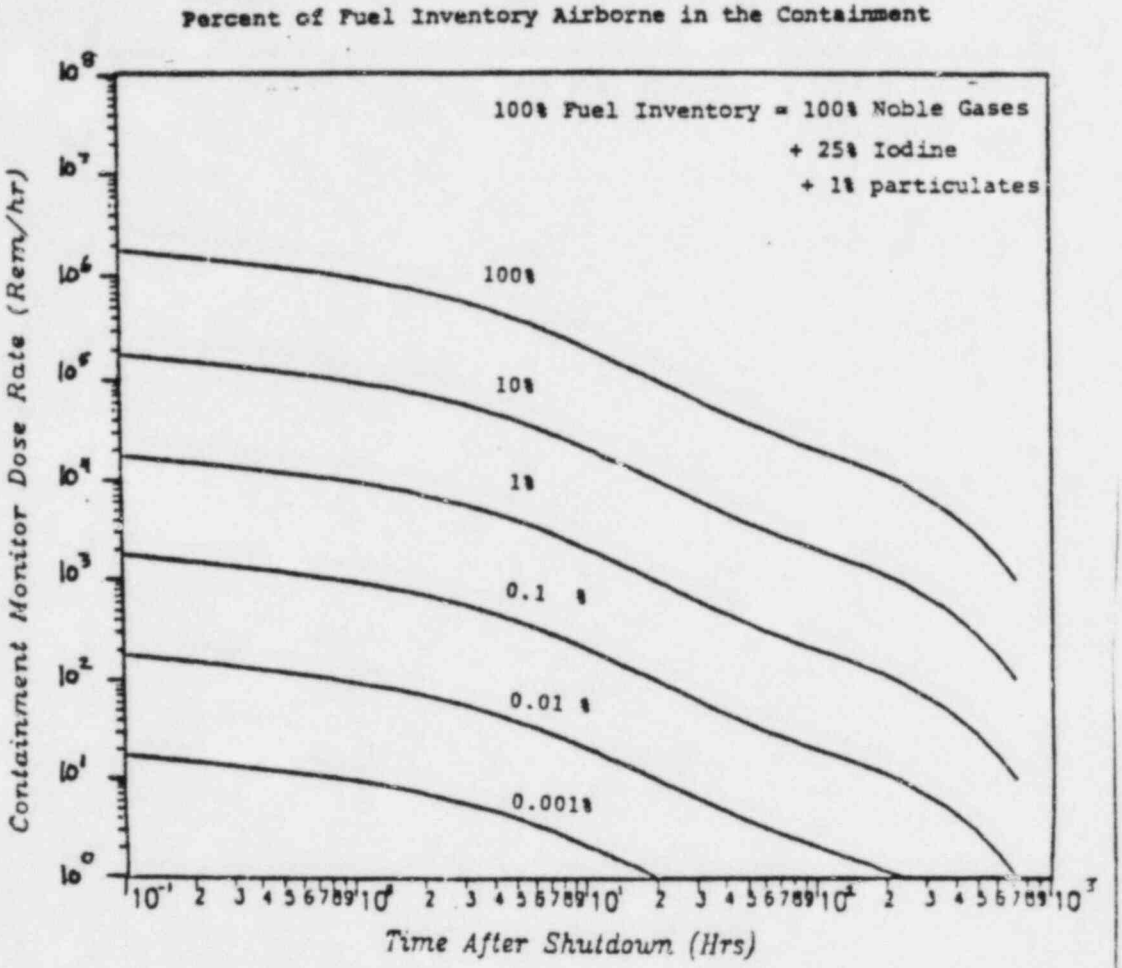
12. Radioiodine concentrations measured at site boundary or beyond exceed 7.0E-8 µCi/cc for 30 minutes or 7.0E-7 µCi/cc for 2 minutes.

GENERAL

As specified in Guideline 28.

WP/kk

FIGURE 1



% Fuel Inventory Released	Approximate Source and Damage Estimate
100.	100% TID-14844, 100% fuel damage, potential core melt.
50.	50% TID noble gases, TMI source.
10.	10% TID, 100% NRC gap activity, total clad failure, partial core uncovered.
3.	3% TID, 100% WASH-1400 gap activity, major clad failure.
1.	1% TID, 10% NRC gap, Max. 10% clad failure.
.1	.1% TID, 1% NRC gap, 1% clad failure, local heating of 5-10 fuel assemblies.
.01	.01% TID, .1% NRC gap, clad failure of 3/4 fuel element (36 rods).
10^{-3}	.01% NRC gap, clad failure of a few rods.
10^{-4}	100% coolant release with spiking.
5×10^{-6}	100% coolant inventory release.
10^{-6}	Upper range of normal airborne noble gas activity in containment.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 2 — IN-PLANT RADIATION LEVELS

UNUSUAL EVENT

Not Applicable

ALERT

Severe degradation in control of radioactive materials.

EAL

1. Increase by factor of 1000 in plant radiation levels as indicated by Area Radiation Monitoring System:

Panel		Description	Normal	EAL
C-11	A-1	Refuel Floor Low Range	2	Full scale
C-11	A-2	Refuel Floor High Range	5	5000
C-11	A-3	Refuel Floor S.W. Stairway	1	1000
C-11	A-4	New Fuel Storage	20	Full scale
C-11	A-5	Fuel Pool Skimmer Tk Area	20	Full scale
C-11	A-6	1001' Rx South	3	Full scale
C-11	A-7	985' Sample Hood	5	Full scale
C-11	A-8	Rx Cleanup System Access	0.25	250
C-11	A-9	962' Rx Tool Storage Area	0.8	800
C-11	A-10	East CRD Module Area	7	Full scale
C-11	A-11	West CRD Module Area	3	Full scale
C-11	A-12	TIP Drive Area	2	Full scale
C-11	A-13	TIP Cubicle	30	Full scale
C-11	A-14	HPCI Turbine Area	2	Full scale
C-11	A-15	Rx. Bldg Drain Tk Area	25	Full scale
C-11	A-16	RCIC Pump Area	1	1000
C-11	A-17	East C.S. and RHR Area	10	Full scale
C-11	A-18	West C.S. and RHR Area	5	Full scale
C-11	A-19	Hot Lab	0.25	250
C-11	A-20	Control Room Low Range	0.02	20

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 2 (Cont'd.)

			IN-PLANT RADIATION LEVEL	
Panel		Description	Normal	EAL
C-11	A-21	Control Room High Range	3	3000
C-11	B-1	Turbine Operating Floor	20	Full scale
C-11	B-2	Turbine Front Standard	10	Full scale
C-11	B-3	Cond Demin Operating Area	1	1000
C-11	B-4	Mechanical Vacuum Pump Rm	9	Full scale
C-11	B-5	Feedwater Pump Area	1	1000
C-11	C-1	Radwaste Control Room	0.2	200
C-11	C-2	Sample Tank Area	2	Full scale
C-11	C-3	Conveyor Operating Area	0.2	200
C-11	D-1	Hot Machine Shop	0.2	200
C-252	E-1	Recombiner Instrument Room	2	Full scale
C-252	E-2	Recombiner Pump Room	2	Full scale
C-252	F-1	Offgas Storage Foyer	0.1	100
C-11	F-2	Offgas Storage Foyer High Range	<100	100
C-257 & C-258		Containment Radiation Monitor		50 R/hr

NOTE: EAL's shown as FULLSCALE indicate that an increase by a factor of 1000 is beyond the range of the particular monitor. In these cases, a fullscale reading combined with the Site Superintendent's concurrence, shall meet the criteria for the ALERT classification.

or

2. Direct measurement of radiation levels corresponding to an increase by a factor of 1000.

SITE AREA

Not applicable

GENERAL

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 3 — REACTOR PRESSURE HIGH

UNUSUAL EVENT

1. Reactor Pressure exceeds safety limit (1335 psig).

Instrument	Description	EAL
C05-FPR 6/97	Reactor Wide Range Pressure Recorder	1200
C05-6.90 A/B	Reactor Pressure Indicators	1200

Verify 1335 psig exceeded by checking pressure indicator PI 2-3-60B on C56.

ALERT

Not Applicable

SITE AREA EMERGENCY

Not Applicable

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 4

REACTOR COOLANT LEAK

UNUSUAL EVENT

Primary system leak rate exceeds technical specification.

EAL's

1. Unidentified leakage calculated from C4-FQ2543 or by computer point D-122, Floor Drain Sump Rate of Change, exceeds 5 gpm

   OR

2. Identified leakage calculated from C4-FQ 2544 or from computer point D-120, Equipment Drain Sump Rate of Change, exceeds 20 gpm.

   OR

3. Unidentified leakage rate increases 2 gpm within any 24 hour period as determined from Test #0381, CONTAINMENT COOLANT LEAKAGE LOG.

ALERT

Primary coolant leak rate greater than 50 gpm.

EAL

1. Total leakage calculated from C4-FQ2543 and FQ-2544 or from computer points D-120, Equipment Drain Sump Rate of Change, D-122, Floor Drain Sump Rate of Change, exceeds 50 gpm.

SITE AREA

Known loss of coolant accident greater than makeup pump capacity.

EAL's

1. Reactor water level (C05-2.3.85 A/B) decreasing below 1 foot above active fuel (-114 inches)

GENERAL

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 5 — MAIN STEAMLINE BREAK

UNUSUAL EVENT

Not Applicable

ALERT

Steamline break with MSIV malfunction causing leakage to secondary containment.

EAL's

1. Site Superintendent's opinion that MSIV is malfunctioning or continuing steam flow with evidence that steam line break is outside of primary containment (e.g. visual observation, radiation or temperature),

and

2a. Annunciator alarms on MAIN STEAM LINE HIGH FLOW A/B (C05-A-25/26) and RX WATER LEVEL HI/LO (C05-B-24),

or

2b. Annunciator alarm MAIN STEAM TUNNEL HIGH TEMPERATURE A/B (C05-A17/18)

or

2c. Annunciator alarm MAIN STEAM LINE LEAKAGE (C05-B-32).

SITE AREA

Main steam line break with failure of MSIV's to isolate leak and causing leakage outside of secondary containment.

EAL's

1. Site Superintendent's opinion that MSIV is malfunctioning or continuing steam flow with evidence that steam line break is outside of primary containment

and

2a. Annunciator alarms on MAIN STEAM LINE HIGH FLOW A/B (C05-A-25/26) and RX WATER LEVEL HI/LO (C05-B-24)

or

ATTACHMENT 2 (Cont'd.)

Guideline 5 (Cont'd.) MAIN STEAMLINE BREAK

2b. Annunciator alarm on MAIN STEAM TUNNEL HIGH TEMPERATURE (C-5-A-17/18)

or

2c. Annunciator alarm on MAIN STEAM LINE LEAKAGE (C05-B-32)

and

3a. Annunciator alarm on TURBINE BUILDING HIGH RADIATION ALARM (C04-A-21)

or

3b. High airborne radioactive material levels in Turbine Bldg. indicated by air monitors or direct measurement

or

3c. Visual observation that blow-out panels between steam chase and turbine building have been ruptured.

GENERAL

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 6

FUEL CLADDING DEGRADATION

UNUSUAL EVENT

Fuel damage indication

EAL's

1. Offgas Radiation Monitor exceeds 20,000 mR/hr
   or
2. Offgas Radiation Monitor increases by 4000 mR/hr within 30 minutes at steady power
   or
3. Reactor coolant I-131 dose equivalent exceeds 5 µCi/gram as determined by sample and analysis.

ALERT

Severe loss of fuel cladding.

a. High offgas at air ejector monitor (greater than 5 ci/sec; corresponding to 16 isotopes decayed 30 minutes)
   or
b. Very high coolant activity sample (e.g., 300 µCi/cc equivalent of I-131)

EAL's

1. Offgas Radiation Monitor exceeds 200,000 mR/hr
   or
2. Reactor coolant I-131 dose equivalent exceeds 300 µCi/gm as determined by sample and analysis.
   or
3. Main Steam Line monitor initiates trip due to high radiation.
   NOTE: Resin intrusion may cause high radiation without fuel cladding damage.

SITE AREA

Degraded Core with possible loss of coolable geometry

EAL's

1. More than 1/3 of core uncovered as indicated by reactor water level below -174 inches and
2. a. Reactor coolant I-131 dose equivalent exceeds 3000 µCi/gm as determined by sample and analysis.
   or
   b. Inability to insert control rods fully
   or
   c. Inability to position SRM's or IRM's within core.

GENERAL

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 7 SAFETY RELIEF VALVE FAILURE

UNUSUAL EVENT

Failure of a safety relief valve to close following reduction of applicable pressure.

EAL's

Auto Blowdown Relief Valve Leakage Alarm, C03-A-09

or

SRV Open Alarm, C05-A-54

ALERT

Not applicable

SITE AREA EMERGENCY

Not applicable

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 8 — ECCS INITIATION

UNUSUAL EVENT

Emergency Core Cooling System (ECCS) initiated and discharge to vessel.

EAL's

1a. RHR flow to reactor as indicated by RHR FLOW A/B Indicator, C03-10.139A/B

or

1b. Core spray flow to reactor as indicated by CORE SPRAY FLOW A/B Indicator, C03-14.50A/B

or

1c. HPCI flow to reactor as indicated by HPCI FLOW Indicator, C03-FIC 23-108

or

1d. APRS actuation as indicated by annunciator AUTO BLOWDOWN TIMERS ACTIVATE (3-A-25) and subsequent S/RV OPEN (5-A-54) annunciator

and

2. Site Superintendent's opinion that an emergency should be declared.

ALERT

Not Applicable

SITE AREA EMERGENCY

Not Applicable

GENERAL EMERGENCY

See Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 10 LOSS OF CONTAINMENT INTEGRITY

UNUSUAL EVENT

Loss of containment integrity requiring shutdown in accordance with Technical Specifications.

EAL's

Plant shutdown is required by any one of the following limiting conditions for operation:

a. TS 3.7.A - Primary Containment; or

b. TS 3.7.B - Standby Gas Treatment System; or

c. TS 3.7.C - Secondary Containment; or

d. TS 3.7.D - Primary Containment Isolation Valves

ALERT

Not Applicable

SITE AREA EMERGENCY

Not Applicable

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 11

LOSS OF ESF OR FIRE PROTECTION SYSTEM

UNUSUAL EVENT

1. Loss of Engineered Safety Features (ESF) or fire protection system requiring shutdown by Technical Specifications. The following is a list of operable ESF and fire protection subsystems necessary to meet LCO:

   Core Spray System

   Low Pressure Coolant Injection Subsystem

   Containment Cooling Capability
   (RHR Service Water System)

   High Pressure Coolant Injection System

   Automatic Pressure Relief

   Diesel Generator System

   Fire Protection System

   Standby Liquid Control System

ALERT

Not Applicable

SITE AREA EMERGENCY

Not Applicable

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 12 REACTOR PROTECTION SYSTEM FAILURE

UNUSUAL EVENT

Not Applicable

ALERT

Failure of the reactor protection system to initiate and complete a scram which brings the reactor subcritical.

EAL's

Valid Scram Signal

and

Neutron count rate indicates reactor critical.

SITE AREA EMERGENCY

Transient requiring operation of shutdown systems with failure to scram (continued power operation but no core damage immediately evident.)

EAL's

Failure to bring reactor subcritical with control rods

and

Failure of the standby liquid control system

and

Site Superintendent's opinion that a transient is in progress

and

No indication of core damage (if core damage indicated, call a general emergency)

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 13

LOSS OF PLANT SHUTDOWN OR SHUTDOWN COOLING CAPABILITY

UNUSUAL EVENT

Not Applicable

ALERT

Complete loss of ability to achieve or maintain cold shutdown.

EAL's

1. Loss of both RHR SW Loops
   or
   Loss of both RHR Systems Shutdown cooling mode of operation
   or
   Loss of both RHR LPCI modes of operation and loss of both core spray systems.

   AND/OR

2. Site Superintendent's opinion that plant cannot reach or maintain cold shutdown.

SITE AREA

Complete loss of ability to achieve or maintain hot shutdown

EAL's

1. Inability to SCRAM and inoperable Standby Liquid Control System

   and

2. Loss of all safety relief valve capability
   or
   Inoperable RHR System
   or
   Inoperable RHR heat sink

   and

3. Loss of main condenser cooling
   or
   No makeup capability from either HPCI or RCIC systems.

   AND/OR

4. Site Superintendent's opinion that plant cannot reach or maintain hot shutdown.

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 14 LOSS OF INSTRUMENTATION

NOTE: Indication of alarm or instrumentation failure may be difficult to determine. A failure of normally lighted indicators or the failure of certain alarms to annunciate during a surveillance procedure may provide an initial warning. A cause of annunciator failure, and thus an indication of failure, could be a loss of the uninterruptable MG set and no transfer to CKT Y10.

UNUSUAL EVENT

Indications or alarms on process or effluent parameters not functional in the Control Room to an extent requiring plant shutdown.

ALERT

Loss of most or all annunciators (on panels C03, C04, C05, C08) sustained for > 15 minutes with the plant not in cold shutdown.

SITE AREA EMERGENCY

1. Loss of most or all annunciators (on panels C03, C04, C05, C08) > 15 minutes and plant transient initiated or in progress.

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 15 — CONTROL ROOM EVACUATION

UNUSUAL EVENT

Not Applicable

ALERT

Evacuation of the Control Room is required or anticipated and control of shutdown systems has been established at local stations. (If local control has not been established in 15 minutes, go to SITE AREA.)

EAL

As determined by on-duty Shift Supervisor.

SITE AREA EMERGENCY

Evacuation of Control Room and control of shutdown systems not established from local stations in 15 minutes.

EAL

As determined by on-duty Site Superintendent.

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 16 TOXIC/FLAMMABLE GASES

UNUSUAL EVENT

Near or onsite toxic or flammable gas release.

EAL

Gaseous hazards being experienced or projected onsite (out-of-plant) as indicated by visual observation, physical measurement or notification.

ALERT

Entry into facility environs of uncontrolled toxic or flammable gases.

EAL's

Gaseous hazards being experienced or projected within the plant as indicated by measured concentrations equal to or greater than:

(a) 10 ppm chlorine; or
(b) explosive levels (as detected by explosive meter).

NOTE: Chlorinator House is not considered to be within the plant.

SITE AREA

Entry of uncontrolled flammable gases into vital areas or entry of uncontrolled toxic gases into vital areas where lack of access to the area constitutes a safety problem and plant is not in cold shutdown.

EAL's

1. Gaseous hazards being experienced or projected within vital areas of the plant as indicated by measured concentration equal to or greater than:

   a) 10 ppm chlorine; or
   b) explosive levels (as detected by explosive meter)

   and

2. Plant not in cold shutdown.

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 17 SECURITY COMPROMISE

NOTE TO EMERGENCY DIRECTOR: For acts of sabotage against plant equipment, refer also to SCPIP-12.

UNUSUAL EVENT

Security threat or attempted entry or attempted sabotage.

EAL

Site Superintendent's opinion.

ALERT

Ongoing security compromise.

EAL

Security safeguards contingency event that results in adversaries commandeering an area of the plant, but not controlling shutdown capability or any vital areas.

SITE AREA

Imminent loss of physical control of the plant.

EAL

Physical attack on the plant involving imminent occupancy of the control room, auxiliary shutdown panels, and any other vital areas.

GENERAL

Loss of physical control of the facility.

EAL

Physical attack on the plant has resulted in unauthorized personnel occupying the control room or any other vital areas.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 18 — LOSS OF AC POWER

UNUSUAL EVENT

Loss of offsite power or loss of onsite AC power capability.

EAL's

1. Loss of all offsite power as indicated by annunciators:

   C08-B-7 No. 1R Res Trans to No. 13 Bus Bkr Trip; and
   C08-C-08 No. 1AR Res Trans to No. 15 Bus Bkr Trip; and
   C08-C-11 No. 1AR Res Trans to No. 16 Bus Bkr Trip; and
   C08-C-19 No. 14 4160V Bus to No. 16 Bus Bkr Trip

   and verified by zero voltage indicated on Bus 11, Bus 12, Bus 13, Bus 14, and 1AR Transformer voltage meters on panel C8.

   or

2. Loss of both Emergency Diesel Generators when they are required to be operable by Technical Specifications.

ALERT

Loss of offsite power and loss ofall onsite AC power. (see Site Area Emergency for extended loss)

EAL's

1. Loss of all offsite power as indicated by annunciators:

   C08-B-7 No. 1R Res Trans to No. 13 Bus Bkr Trip; and
   C08-C-08 No. 1AR Res Trans to No. 15 Bus Bkr Trip; and
   C08-C-11 No. 1AR Res Tras to No. 16 Bus Bkr Trip; and
   C08-C-19 No. 14 4160V Bus to No. 16 Bus Bkr Trip

   and verified by zero voltage indicated on Buss 11, Bus 12, Bus 13, Bus 14 and 1AR Transformer voltage meters on panel C8.

   and

2. Loss of both Emergency Diesel Generators when they are required to be operable by Technical Specifications.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 18 (Cont'd.) LOSS OF AC POWER

SITE AREA

Loss of all offsite power and loss of onsite AC power for more than 15 minutes.

EAL's

1. Loss of all offsite power as indicated by annunciators:

   C08-B-7 No. 1R Res Trans to No. 13 Bus Bkr Trip; and
   C08-C-08 No. 1AR Res Trans to No. 15 Bus Bkr Trip; and
   C08-C-11 No. 1AR Res Tras to No. 16 Bus Bkr Trip; and
   C08-C-19 No. 14 4160V Bus to No. 16 Bus Bkr Trip

   and verified by zero voltage indicated on Buss 11, Bus 12, Bus 13, Bus 14 and 1AR Transformer voltage meters on panel C8.

   and

2. Loss of both Emergency Diesel Generators when they are required to be operable by Technical Specifications.

   and

3. 15 minute time lapse.

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 19 LOSS OF DC POWER

UNUSUAL EVENT

Not applicable.

ALERT

Loss of all vital DC power. (See Site Area Emergency for extended loss.)

EAL's

Loss of both 125V DC power sources and loss of 250V DC power source as indicated by:

1. Annunciators C08-A-20 250V Bus Low Voltage; and
   C08-B-13 No. 12 125V DC Bus Low Voltage; and
   C08-C-13 No. 11 125V DC Bus Low Voltage
   AND
2. Site Superintendent's opinion that all vital DC power is lost or degraded voltages are measured at battery terminals.

SITE AREA

Loss of all vital onsite DC power for more than 15 minutes.

EAL's

Loss of both 125V DC power sources and loss of 250V DC power source as indicated by:

1. Annunciators C08-A-20 250V Bus Low Voltage; and
   C08-B-13 No. 12 125V DC Bus Low Voltage; and
   C08-C-13 No. 11 125V DC Bus Low Voltage
   AND
2. Site Superintendent's opinion that all vital DC power is lost or degraded voltages are measured at battery terminals.
   AND
3. Lapse of 15 minutes.

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 20

TORNADO OR SUSTAINED WINDS

UNUSUAL EVENT

Any tornado on-site.

EAL's

A tornado is observed to touch down within site boundary

or

Sustained winds above 75 mph for greater than 10 minutes at the site.

ALERT

Tornado striking facility.

EAL's

A tornado strikes a vital plant structure

or

Sustained winds above 90 mph for greater than 10 minutes at the site.

SITE AREA

Sustained winds or tornadoes in excess of design levels.

EAL's

Tornado causes damage to vital plant equipment or structures

or

Sustained winds above 100 mph for greater than 10 minutes at the site.

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 21 — RIVER WATER HI/LOW

UNUSUAL EVENT

1. River water level in excess of 918 Feet
2. River flow below 240 CFS (about 902.4 FT river level)

ALERT

1. River water level between 921 and 930 FT.
2. River flow below 220 CFS (about 902.3 FT).

SITE AREA EMERGENCY

1. River water level exceeds 930 FT.
2. River water level below 899 FT.
3. Flood or low water causes damage to vital equipment.

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 22 EARTHQUAKE

UNUSUAL EVENT

Any earthquake felt in-plant or detected on station seismic instrumentation, and subsequently confirmed by one or more off-site sources.

EAL's

1. Alarm C06-C-8, EARTHQUAKE

or

2. Site Superintendent's opinion

ALERT

Confirmed earthquake greater than OBE levels.

EAL

Alarm C06-C-13, OPERATIONAL BASIS EARTHQUAKE

SITE AREA

Confirmed earthquake greater than DBE levels and plant not in cold shutdown.

EAL's

Alarm C06-C-18, DESIGN BASIS EARTHQUAKE

and

Plant not in cold shutdown.

GENERAL EMERGENCY

As specified in Gudeline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 23 FIRE

UNUSUAL EVENT

Fire within plant lasting more than 10 minutes after initiation of fire fighting.

EAL

Fire Brigade Leader's determination.

ALERT

Fire potentially affecting safety systems.

EAL's

Observation that fire could affect safety system;

and

Site Superintendent's opinion.

SITE AREA

Fire compromising the functions of safety system.

EAL's

Observation of fire that affects safety systems or functions;

and

Site Superintendent's opinion.

GENEAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 24 EXPLOSION

UNUSUAL EVENT

Near or On-site explosion.

EAL

Visual observation or notification received;

and

Site Superintendent's opinion.

ALERT

Known explosion damage to facility affecting plant operation.

EAL

Site Superintendent's opinion.

SITE AREA

Severe damage to safe shutdown equipment from explosion or missiles.

EAL's

Plant not in cold shutdown

and

Site Superintendent's opinion

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 25 — AIRCRAFT & MISSILES

UNUSUAL EVENT

1. Aircraft crash onsite or suspicious aircraft activity over facility.

EAL

Visual observation or notification is received.

ALERT

Aircraft crash on the facility or missile impacts on facility.

EAL

Visual observation

SITE AREA

a. Aircraft crash affecting vital structures by impact or fire.

b. Severe damage to safe shutdown equipment from missiles or explosion.

EAL

As determined by Site Superintendent with plant not in cold shutdown.

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 26 MISCELLANEOUS

UNUSUAL EVENT

a. Transportation of contaminated injured individual from site to offsite hospital.

b. Train derailment on site.

c. Turbine rotating component failure causing rapid plant shutdown.

EAL's

1. Visual observation

or

2. Site Superintendent's opinion

ALERT

Turbine failure causing casing penetration.

EAL's

1. Visual observation

and

2. Site Superintendent's opinion

SITE AREA EMERGENCY

Not Applicable

GENERAL EMERGENCY

As specified in Guideline 28.

WP/kk

ATTACMENT 2 (Cont'd.)

Guideline 28 — ALL GUIDELINES - GENERAL EMERGENCY

GENERAL EMERGENCY

a. Effluent monitors detect levels corresponding to 1 rem/hr W.B. or 5 rem/hr thyroid at the site boundary under actual meteorological conditions.

b. These dose rates are projected based on other plant parameters (e.g., radiation levels in containment with leak rate appropriate for existing containment pressure with some confirmation from effluent monitors) or are measured in the environs.

EAL's

1. Stack Effluent Monitor (Ch. A or B) exceeds:

   1.3E+8 µCi/sec in stability class A
   1.9E+8 µCi/sec in stability class B
   1.0E+9 µCi/sec in stability class C
   1.0E+9 µCi/sec in stability class D
   1.0E+9 µCi/sec in stability class E
   1.0E+9 µCi/sec in stability class F

   or

2. RBV Effluent Monitor exceeds:

   9.6E+7 µCi/sec in stability class A
   3.1E+7 µCi/sec in stability class B
   1.5E+7 µCi/sec in stability class C
   7.1E+6 µCi/sec in stability class D
   4.4E+6 µCi/sec in stability class E
   2.8E+6 µCi/sec in stability class F

   or

3. Stack radioiodine release rate exceeds:

   2.3E+6 µCi/sec in stability class A
   2.6E+6 µCi/sec in stability class B
   3.4E+6 µCi/sec in stability class C
   4.9E+6 µCi/sec in stability class D
   4.9E+6 µCi/sec in stability class E
   5.9E+6 µCi/sec in stability class F

   or

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 28 (Cont'd.) ALL GUIDELINES - GENERAL EMERGENCY

4. RBV radioiodine release rate exceeds:

   1.9E+6 µCi/sec in stability class A
   6.0E+5 µCi/sec in stability class B
   3.0E+5 µCi/sec in stability class C
   1.4E+5 µCi/sec in stability class D
   8.6E+4 µCi/sec in stability class E
   5.6E+4 µCi/sec in stability class F

   or

5. Release rate projection based on Containment Radiation Monitor exceeds any of the values in 1 or 2 above

   or

6. Dose rates of 1 rem/hr W.B. are measured at the site boundary or beyond

   or

7. Radioiodine concentrations measured at the site boundary or beyond exceed 7E-6 µCi/cc.

NOTE: Consider evacuation only within about 2 miles of the site boundary unless these levels are exceeded by a factor of 10 or projected to continue for 10 hours or EPA Protective Action Guideline exposure levels are predicted to be exceeded at larger distances.

c. Loss of 2 of 3 fission product barriers with a potential loss of 3rd barrier, (e.g., loss of primary coolant boundary, clad failure and high potential for loss of containment).

EAL's

1. Failure of fuel cladding as evidenced by gap activity in reactor coolant (> 300 µCi/gram I-131 dose equivalent) or presence of gap activity in primary containment atmosphere.

   and

   Failure of primary coolant boundary as evidenced by:

   high drywell pressure; or
   high drywell temperature; or
   failure of MSIV's to isolate; or
   safety relief valve stuck open; or
   gap activity in primary containment atmosphere

   and

ATTACHMENT 2 (Cont'd.)

Guideline 28 (Cont'd.) ALL GUIDELINES - GENERAL EMERGENCY

Potential loss of containment as evidenced by:

containment temperature or pressure approaching design limits (281°F and 56 psig) and increasing; or
loss of containment cooling; or
Site Superintendent's opinion that loss of containment is likely.

NOTE 1: Failure of MSIV's to isolate constitutes a loss of both primary coolant boundary and containment. When this is combined with cladding failure, all three barriers have been lost.

NOTE 2: In situations of:

a) Small or large LOCA with failure of ECCS to perform, or
b) Loss of requisite decay heat removal systems (RHR and other heat sinks) following shutdown,

loss of containment should be judged to be likely.

2. Failure of fuel cladding (per guideline 6)

and

Failure of containment as evidenced by all containment penetrations required for isolation not valved off or closed; or Site Superintendent's opinion that containment has failed

and

Potential loss of primary coolant boundary as evidenced by reactor pressure near design limits and increasing or loss of ECCS.

3. Failure of containment as evidenced by all containment penetrations required for isolation not valved off or closed or Site Superintendent's opinion

and

Failure of primary coolant boundary as evidenced by high drywell pressure or temperature or failure of MSIV's to isolate or stuck open safety relief valve

and

Potential for loss of cladding as evidenced by ECCS failure or reactor water level low and decreasing.

WP/kk

ATTACHMENT 2 (Cont'd.)

GUIDELINE 28 (Cont'd.) ALL GUIDELINES - GENERAL EMERGENCY

NOTE: Consider 2 mile precautionary evacuation. If more than fuel gap activity released, extend this to 5 miles downwind.

d. Loss of physical control of the plant.

NOTE: Consider 2 mile precautionary evacuation.

e. Other plant conditions exist, from whatever source, that make release of large amounts of radioactivity in a short time period possible, e.g., any core melt situation. See the example BWR sequences.

Example BWR Sequences

1. Transient (e.g., loss of off-site power) plus failure of requisite core shutdown systems (e.g., scram or standby liquid control system). Could lead to core melt in several hours with containment failure likely. More severe consequences if pump trip does not function.

2. Small or large LOCA's with failure of ECCS to perform, leading to core degradation or melt in minutes to hours. Loss of containment integrity may be imminent.

3. Small or large LOCA occurs and containment performance is unsuccessful affecting longer term success of the ECCS. Could lead to core degradation or melt in several hours without containment boundary.

4. Shutdown occurs but requisite decay heat removal systems (e.g., RHR) or non-safety systems heat removal means are rendered unavailable. Core degradation or melt could occur in about ten hours with subsequent containment failure.

5. Any major internal or external events (e.g., fires, earthquakes, substantially beyond design basis) which could cause massive common damage to plant systems resulting in any of the above.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 29

OTHER PLANT CONDITIONS

UNUSUAL EVENT

1. Plant conditions exist that warrant increased awareness on the part of plant operating staff or State and/or local offsite authorities.

2. Plant conditions exist that require shutdown under technical specification requirements.

3. Plant conditions exist that involve other than normal controlled shutdown (e.g. cooldown rate exceeding technical specification limits or pipe cracking found during operation).

ALERT

Plant conditions exist that warrant precautionary activation of TSC and placement of EOF and other key emergency personnel on standby.

SITE AREA EMERGENCY

Other plant conditions exist that warrant activation of emergency centers and monitoring teams or precautionary notification to nearsite public.

WP/kk

ATTACHMENT 2 (Cont'd.)

Guideline 30 — MAJOR DAMAGE TO SPENT FUEL

UNUSUAL EVENT

Not applicable

ALERT

Fuel damage accident with release of radioactivity to containment.

EAL's

1. Dropping, bumping or otherwise rough handling of a spent bundle or individual fuel rods.

and

2. Fuel Pool Radiation Monitor Ch A or B exceeds 50 mR/hr (confirmed by annunciator 5-A-1 or 5-A-2).

SITE AREA

Major damage to spent fuel in containment (e.g., large object damages fuel or water loss below fuel level).

EAL's

1. a. Decrease in fuel pool level below 36'9" confirmed by LT-2787, Spent Fuel Pool Level Hi/Lo alarm

   or

   b. Dropping of heavy object onto spent fuel confirmed by direct observation

   and

2. Fuel Pool Radiation Monitor Ch A or B exceeds 50 mR/hr. (Confirmed by annunciator 5-A-1 or 5-A-2)

GENERAL

As specified in Guideline 28.

WP/kk

ATTACHMENT 3

Form 5790-101-1
Rev. 1, 10/20/81
Page 1 of 1

Example of
EMERGENCY CLASSIFICATION CHECKLIST
(For Use With Procedure A.2-101)

1. Initiating Condition: _____

_____ _____ _____ _____
ED Initials Time Date

2. Attachment 1 directs use of Guideline Number(s): _____.

_____ _____ _____
ED Initials Time Date

3. Attachment 2 classification: _____

_____; Declared: _____ _____ _____
ED Initials Time Date

4. Implemented Procedure A.2- _____. _____ _____ _____
ED Initials Time Date

NOTE: If reclassification becomes necessary, start a new Emergency Classification Checklist.

NOTE: After this checklist is completed and is not required for immediate use, it shall be placed in the appropriate container provided for Emergency Records.

WP/kk

Op. Com. Rev. Req'd. Yes X No ___
Q.A. Review Req'd. Yes ___ No X
ALARA Review Req'd. Yes ___ No X

GENERAL EMERGENCY

A.2-105

Prepared by: R L Berry ALARA Review: Revision 0 Date 3/29/81
Reviewed by: G O Mathiam Q.A. Review: Revision 0 Date 3/29/81
Operations Committee Final Review: Meeting Number 1226 Date 9/22/82
Approved by: J W Winkler Date 9/27/83
Op. Com. Results Review: Not Required Mtg. # 950 Date 3/27/81

PURPOSE

This procedure describes the actions to be taken in the event that a General Emergency has been declared at the Monticello Nuclear Generating Plant. This procedure also designates the prescribed pre-planned response actions necessary to contend with the emergency condition and references applicable procedures that describe the necessary supplementary actions.

The Emergency Director (Site Superintendent until properly relieved by a designated alternate) is responsible for the completion of the prescribed actions in this procedure. The Emergency Director may delegate responsibility for performance of the prescribed tasks available qualified NSP personnel, except where otherwise specified in this procedure.

CONDITIONS AND PREREQUISITES

A. A General Emergency has been declared based on the occurrence of events which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity. Events classified as General Emergencies are described in A.2-101 (Classification of Emergencies).

OR

B. A lesser emergency had been declared and emergency measures are being performed; and on the basis of subsequent information or upon a deterioration in plant conditions, the emergency has been reclassified as a General Emergency.

PRECAUTIONS

A. Continued surveillance and assessment of plant conditions are necessary to ensure that the emergency classification is revised appropriately as conditions change or more definitive information is obtained.

B. The General Emergency classification includes actual or imminent events for which off-site protective actions will be needed. In consideration of the lead time necessary to implement off-site protective actions, notification to off-site authorities must be made as soon as possible following the initiating event and immediately after declaration of General Emergency.

ORGANIZATION

A. Overall Responsibility - Emergency Director (Site Superintendent, until relieved)

B. In Charge

Control Room - Site Superintendent
* Technical Support Center - Emergency Director
* Emergency Operations Facility - Emergency Manager
* Assembly Point - Assembly Point Coordinator

C. Assistance

* Technical Support Center - Plant Management, Technical & Engineering Support
Control Room - Lead Plant Equipment & Reactor Operator; Shift Technical Advisor When assigned, & Shift Emergency Communicator

* After augmentation

RESPONSIBILITIES

A. Emergency Director (Site Superintendent, until relieved)

1. Implement appropriate Emergency Plan Implementing Procedures.

2. Ensure that appropriate Emergency Operating Procedures are implemented.

3. Determine what support is required and assign the Shift Emergency Communicator to make necessary calls.

4. Implement any assessment, protective or corrective actions necessary on-site and make recommendations for any necessary off-site protective actions.

5. Respond to situation with the objective of returning plant to normal status (or cold shutdown if this is determined to be necessary).

6. Watch the situation closely to determine when the threat to plant safety has passed.

7. Recommend reduction to a lower class or terminate emergency condition.

NOTE: Emergency Director responsibilities that may NOT be delegated include:

a. Decision to notify off-site emergency management agencies.

b. Making protective action recommendations as necessary to off-site emergency management agencies.

c. Classification of Emergency Event.

d. Determining the necessity for on-site evacuation.

e. Authorization for emergency workers to exceed normal radiation exposure limits.

B. Site Superintendent (Shift Supervisor, if Superintendent is not available)

1. Implement appropriate Emergency Operating Procedures.

2. Assist the Emergency Director as requested.

C. Control Room Personnel

1. Assist the Site Superintendent as requested.

2. Monitor control room instruments continually for any sign of increasing radiation, system degradation or any new developments. Notify the Site Superintendent immediately in any of these cases.

D. Shift Technical Advisor

Provide the Emergency Director and the Site Superintendent with technical advice.

E. Shift Emergency Communicator

1. Report to the Control Room.

2. Notify off-site personnel, Federal, State and Local Agencies.

3. Coordinate communications from the Emergency Director as required.

F. Shift Radiation Protection Specialists

1. Report to Access Control. Be prepared to assist the Site Superintendent with any immediate matters as requested.

2. Be prepared to implement procedures which may be required if the situation degrades.

PROCEDURE

STEP 1: As necessary, contact the Shift Technical Advisor and the Shift Emergency Communicator using the following numbers:

STA: DELETED

SEC: DELETED

Initiate General Emergency Checklist Form 5790-105-1 (Attachment 1).

WP/kk

STEP 2: Using the public address system, announce or have announced, a message advising plant personnel of the situation.

For example:
"ATTENTION ALL PLANT PERSONNEL: A GENERAL EMERGENCY HAS BEEN DECLARED".

If appropriate add:
"ALL MEMBERS OF THE EMERGENCY ORGANIZATION REPORT TO YOUR EMERGENCY DUTY STATIONS.

Repeat message slowly.

NOTE 1: During drills or tests, the message will begin and end with the phrase, "THIS IS A DRILL" or "THIS IS A TEST".

NOTE 2: Messages may be modified to give more information or to fit the situation.

STEP 3 Ensure that appropriate Abnormal Operating Procedures have been implemented.

STEP 4 Ensure implementation of Procedure A.2-106, Activation of Technical Support Center, and Procedure A.2-107, Activation of Operational Support Center.

STEP 5 Initiate a plant evacuation (if it has not been executed) unless extreme circumstances make it inadvisable. Implement procedure A.2-301, Emergency Evacuation.

STEP 6: Until the REC position is activated, ensure that onsite and inplant radiation surveys are conducted as necessary and that appropriate radiochemistry samples are taken as necessary.

STEP 7: SEE NOTE 2 BELOW. If the initial notifications have not been made under a previous procedure, direct the SEC to compose Emergency Notification Report, Form 5790-102-2 (Attachment 2) and submit for Emergency Director approval, transmit initial notification using Emergency Call List-General Emergency, Form 5790-104-4 (Attachment 4). Ensure that recommendations include activation of public notification system and sheltering out to 2 miles in all directions and 5 miles downwind (45° to 90° sector).

STEP 8: SEE NOTE 2 BELOW. If the initial notifications have been made and the emergency is being reclassified, direct the SEC to compose Emergency Classification Change, Form 5790-102-7 (Attachment 7) and submit for Emergency Director approval, transmit classification change using Emergency Call List-General Emergency Form 5790-104-4 (Attachment 4). Ensure that a recommendation for activation of public notification system and sheltering out to 2 miles in all directions and 5 miles downwind (45° to 90° sector) is made.

NOTE 1: Communications should be per Procedure A.2-501, Communications During an Emergency.

NOTE 2: When the EOF is fully activated, the plant will be relieved of the responsibility for offsite notifications (STEPS 7 and 8).

STEP 9: If federal, state or local off-site support is required, direct the Shift Emergency Communicator to request assistance. Use Form 5790-102-6 (Attachment 5) to compile list.

STEP 10: Augment on-shift personnel. As required, direct the Shift Emergency Communicator to contact appropriate individuals or agencies as required from the Monticello Emergency Augmentation List, Form 5790-102-5.

STEP 11: Direct the REC to implement the following procedures:

a. A.2-201 (On-Site Monitoring During an Emergency)

b. A.2-202 (Off-Site Monitoring During an Emergency)

NOTE: Off-site monitoring is the responsibility of the on-site emergency organization only until the EOF attains the capability to perform this task.

c. A.2-204 (Off-Site Protective Action Recommendations).

Consider implementation of strict plant status controls in accordance with 4 ACD-4.7. If it is a radiological emergency, implement high radiation area controls.

STEP 12: Consider augmentation of Radiation Protection Staff. If appropriate call Prairie Island Plant 612/388-1121 and have the Shift Supervisor initiate Procedure F3-22 (Prairie Island Radiation Protection Group Response to Monticello Emergency). If additional contract health physics support is required, contact Institute for Resource Management Inc. DELETED

STEP 13: Direct the REC (or SEC until the REC is activated) to prepare periodic followup information messages, using form 5790-102-3, EMERGENCY NOTIFICATION FOLLOWUP MESSAGE. Review and approve the message content and direct the SEC to transmit the information to the State EOC and the two county EOC's.

NOTE 1: The minimum frequency of followup messages should be every 30 minutes.

NOTE 2: As specified on the message form, protective action recommendations should not be given to local or county officials once the State EOC is activated.

NOTE 3: When the EOF becomes operational, the followup information messages shall be forwarded to the EOF for transmission to offsite officials.

NOTE 4: Senior technical and management personnel on the plant staff should be made available for consultation with NRC and State personnel on a periodic basis.

WP/kk

STEP 14: Based upon assessment of plant conditions either:

a. Recommend reduction in class, or

b. Close-out the General Emergency,

per Procedure A.2-101 (Classification of Emergencies).

STEP 15: Should reclassification of the emergency be necessary, initiate a new procedure (A.2-102, 103 or 105).

STEP 16: In the event of a close-out, ensure that all appropriate agencies and individuals are promptly notified. The message should include a brief summary of the event, the fact that it has been terminated, whether or not a recovery will be initiated, and any organizational changes.

REFERENCES

1. Monticello Nuclear Generating Plant Emergency Plan

2. Monticello Nuclear Generating Plant Operations Manual

3. NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"

ATTACHMENTS

1. Example of Site Area Emergency Checklist
2. Example of Emergency Notification Report Form
3. Example of Emergency Notification Followup Message
4. Example of Emergency Call List - General Emergency
5. Example of Secondary Notification List
6. Example of Emergency Classification Change

WP/kk

ATTACHMENT 1

Form 5790-105-1
Revision 3, 03/01/82
Page 1 of 1

Example of
GENERAL EMERGENCY CHECKLIST
(For Use With Procedure A.2-105)

		ED Initial	Time	Date
1.	STA and SEC summoned.			
2.	Announced emergency classification.			
3.	Abnormal Operating Procedures implemented.			
4.	TSC and OSC activated.			
5.	Plant evacuation initiated.			
6.	Onsite and inplant rad surveys and radiochemistry samples directed as necessary.			
7.	Offsite notifications directed.			
8.	Directed SEC to request off-site support (Form 5790-102-6).			
9.	Directed SEC to contact Plant Staff as required for Shift Augmentation, Form 5790-102-5.			
10.	Assessment: implemented the following procedures:			
	A.2-201 (On-Site Monitoring)			
	A.2-202 (Off-Site Monitoring)			
	A.2-204 (Off-Site Protective Actions			
		ED Initials	Time	Date
11.	Rad. Prot. Staff augmentation implemented.			
12.	Followup notification initiated.			
13.	(Closed Out/down-grade to a lower class) based upon Procedure A.2-101.			

NOTE: After this checklist is completed and is not required for immediate use, it shall be placed in the appropriate container provided for emergency records.

WP/kk

ATTACHMENT 2

Form 5790-102-2
Revision 3, 02/19/82
Page 1 of 1

Example of
EMERGENCY NOTIFICATION REPORT*

Verify that the organization/person called is correct prior to relaying emergency information.

THIS IS _____ (Name), _____ (Title) AT THE MONTICELLO NUCLEAR GENERATING PLANT.
WE HAVE DECLARED A(N) _____ AT _____ HOURS.
(Emergency Class) (Time)

Pick one of the following, based on information from Control Room Personnel or Shift Supervisor:

( ) WE HAVE NOT HAD A RADIOACTIVE RELEASE.
( ) WE HAVE HAD A(N) _____ (Liquid or Airborne) RADIOACTIVE RELEASE.

ATMOSPHERIC CONDITIONS AT THE PRESENT TIME ARE AS FOLLOWS:
WIND DIRECTION IS FROM THE _____ (Direction) AT _____ (Speed) MPH.

THE AFFECTED SECTOR(S) IS(ARE) _____.
(List sector(s) by letter designation as determined by map in TSC.)

Protective Action Recommendation (pick one):

THE PROTECTIVE ACTION RECOMMENDED AT THIS TIME IS (From Emer. Dir./Procedure A.2-204):

( ) None
( ) SHELTER OUT TO _____ (Distance) MILES
( ) EVACUATE OUT TO _____ (Distance) MILES
( ) ACTIVATE PUBLIC ALERT & NOTIFICATION SYSTEM
( ) CLOSE MINNEAPOLIS AND ST. PAUL WATER INTAKES

Give a brief description of the emergency.

_____

_____

PLEASE RELAY THIS INFORMATION TO YOUR EMERGENCY ORGANIZATION PERSONNEL.

Emergency Director Approval _____ (Name/Date)

Emergency Communicator _____ (Name/Date)

NOTE: After this checklist is completed and is not required for immediate use, it shall be placed in the appropriate container provided for Emergency Records.

* Complete as much of the form as information available or time allows. All blanks need not be filled out.

WP/kk

ATTACHMENT 3

Form 5790-102-3
Revision 5, 05/17/83
Page 1 of 2

Example of
EMERGENCY NOTIFICATION FOLLOWUP MESSAGE*

Date _____

1. Location of incident: Monticello

2. Class of emergency: _____

3. Type of release:
   ( ) actual ( ) airborne
   ( ) projected ( ) waterborne
   ( ) surface spill

4. Current release data:
   Time: _____ hours am/pm
   Release rate: _____ µCi/sec
   Height of release: ( ) ground level
   ( ) 100 meters (stack)

   Relative quantity: _____ % Noble gases _____ µCi/sec
   _____ % Iodines _____ µCi/sec
   _____ % Particulates _____ µCi/sec

   Estimated quantity of radioactive material released or being released: _____ curies

5. Meteorological Conditions:
   Wind Direction (from): _____ degrees
   Atmospheric Stability Class _____
   Wind Velocity _____ mph
   Temperature _____ °C
   Form of Precipitation _____

6. Release is expected to continue for _____ hours.

7. Dose Projections based on a release rate of _____ µCi/sec at _____ hours am/pm.

		Whole Body	Thyroid	Sectors Affected
Projected dose rate at:	S.B.	_____ mrem/hr	_____ mrem/hr	_____
	2 miles	_____ mrem/hr	_____ mrem/hr	_____
	5 miles	_____ mrem/hr	_____ mrem/hr	_____
	10 miles	_____ mrem/hr	_____ mrem/hr	_____
Projected integrated dose at:	S.B	_____ mrem	_____ mrem	_____
	2 miles	_____ mrem	_____ mrem	_____
	5 miles	_____ mrem	_____ mrem	_____
	10 miles	_____ mrem	_____ mrem	_____

* Complete as much of the form as information availability and time allows. All blanks need not be completed.

WP/kk

ATTACHMENT 3 (Cont'd.)

Form 5790-102-3
Revision 5, 05/17/83
Page 2 of 2

8. Survey Results

TIME	SURVEY POINT	READING
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Estimate of any surface radioactive contamination: _____ dpm/100 cm^2

10. Chemical and physical form of released material: _____

11. Emergency response activities underway: _____

_____

_____

12. For liquid release to the River, estimate release volume, release activity and estimated time for contamination to reach public water:

_____

13. See the CAUTION. Recommended emergency actions, including protective actions:

_____

_____

CAUTION: Do NOT relay this information to local or county officials once the State EOC is activated.

14. Request for any needed support by off-site organizations:

_____

_____

15. Prognosis for worsening or termination of event based on plant information:

_____

_____

_____
Emergency Director (or Designee)

NOTE: After this checklist is completed and is not required for immediate use, it shall be placed in the appropriate container provided for emergency records.

WP/kk

ATTACHMENT 4

Form 5790-104-4
Revision 8, 04/15/83
Page 1 of 5

Example of
EMERGENCY CALL LIST - ALERT/SITE AREA/GENERAL

NOTE 1: The Shift Emergency Communicator shall make notifications to the individuals and organizations listed on the appropriate Emergency Call List.

NOTE 2: For those notifications made by telephone, make the call as follows:

a. Contact each organization or individual using the contact information listed in the attachment for the appropriate emergency class.

b. When the party answers, read the text of the notification.

c. Note the name of the individual contacted and the time of the contact.

d. Proceed to the next party on the call-list.

e. If a party can not be contacted in two attempts, bypass that party and proceed down the list. After the other notifications are complete, reattempt to contact any bypassed parties. If a party still can not be reached, consider other means such as dispatching a courier, relay through another party or similar actions.

f. If the parties call back for further information, note the time and the name of the individuals.

g. If a party not specified on the call list requests information, refer the party to the NSP Communications Department or to the local emergency services organization in his/her community, as appropriate.

NOTE 3: Some of the below listed individuals may be on site when the emergency is declared. They will not require additional notification if it is known that they are at their designated emergency duty stations.

WP/kk

ATTACHMENT 4 (Cont'd.)

Form 5790-104-4
Revision 8, 04/15/83
Page 2 of 5

EMERGENCY CALL LIST - ALERT/SITE AREA/GENERAL (Cont'd.)

NOTIFICATIONS

1. Notify the Minnesota Division of Emergency Services. The telephone number is DELETED night or day (ask for the Duty Officer). Request Emergency Services to notify the Department of Health.

Contact Person	Time	Initial Notification SEC Initials	Verification SEC Initials

NOTE 1: This notification shall be made within 15 minutes of declaration of emergency class.

NOTE 2: This call will be verified via the DELETED line. If no verification within 30 minutes, contact the State again.

2. Notify the local authorities by telephone as follows: Notification

a. Wright County:

Before EOC activation, notify:
Wright County Sheriff --DELETED
(or)
(or) DELETED Time _____ _____
SEC Initials

After EOC activation, notify:
Wright County EOC --DELETED Time _____ _____
SEC Initials

b. Sherburne County:

Before EOC activation, notify:
Sherburne County Sheriff -DELETED Time _____ _____
SEC Initials

After EOC activation, notify:
Sherburne County EOC --- DELETED Time _____ _____
SEC Initials

NOTE: These notifications shall be made within 15 minutes of declaration of emergency class.

****
* NOTE WELL: IF THIS CHECKLIST HAS PREVIOUSLY BEEN USED TO MAKE *
* NOTIFICATIONS, THE FOLLOWING STEPS NEED NOT BE *
* REPEATED FOR FURTHER ESCALATIONS. *
****

WP/kk

ATTACHMENT 4 (Cont'd.)

Form 5790-104-4
Revision 8, 04/15/83
Page 3 of 5

EMERGENCY CALL LIST - ALERT/SITE AREA/GENERAL (Cont'd.)

3. Notify the Local Civil Defense.

	Working Hours	Nights/ Holidays
Monticello Civil Defense	DELETED	DELETED

SEC Initials

4. See the NOTE.

Using the telephone pager system, notify the group of individuals listed below by dialing DELETED calmly transmit the following message entire group.

"ATTENTION EMERGENCY RESPONSE ORGANIZATION. PLEASE REPORT TO THE PLANT IMMEDIATELY. I REPEAT, PLEASE REPORT TO THE PLANT IMMEDIATELY."

If anyone calls into the plant for a repeat or clarification, calmly indicate that an emergency has been declared and that the emergency organization should report to the plant immediately.

Persons Contacted With Pager Group Call:

Emergency Director and Alternate
Radiological Emergency Coordinator and Alternate
Operations Group Leader
Maintenance Group Leader and Alternate
Engineering Group Leader and Alternate
Support Group Leader and Alternate
Security Group Leader and Alternate
EOF Coordinator

NOTE: This step not required if the entire Emergency Response Organization has already been activated.

5. See the NOTE.

Using the tone-activated radios, notify the remainder of the ERO, local officials and near-site residents according to the following steps:

a. Insert the prerecorded tape designated 'ERO Callout' into the TRANSMITTING UNIT.

b. Set the selector switch on the TRANSMITTING UNIT to 'ANSWER'.

c. On the CONTROL UNIT, turn the key in the 'TRANSMIT ENABLE' switch. The red 'XMIT' lamp should light.

WP/kk

ATTACHMENT 4 (Cont'd.)

Form 5790-104-4
Revision 8, 04/15/83
Page 4 of 5

EMERGENCY CALL LIST - ALERT/SITE AREA/GENERAL (Cont'd.)

d. Enter 06 on the ENCODER UNIT and press 'P'. (The tape will be transmitted 3 times automatically.) If the system is working properly, the tone-activated unit in the TSC will be activated.

e. When the transmissions have ended, remove the tape and insert the tape designated 'Local Notifications' into the TRANSMITTING UNIT.

f. Enter 01 on the ENCODER UNIT and press 'P'. When the series of toner stops enter 04 and press 'P'.

g. The tape will be transmitted three times. When the transmissions have ended, turn the key in the 'TRANSMIT ENABLE' switch. The green 'TEST' lamp shall light.

h. Remove the message cassette from the TRANSMITTING UNIT and insert it into the ANSWERING UNIT.

ERO Personnel With Telephone Paging Radios

13	SEC's	8	EOF Coordinators
6	Site Superintendents	16	SRO's
3	Maintenance Supervisors	17	Rad. Prot./Chem. Personnel
2	Electricians		
4	I&CS Personnel		
12	STA's		

NOTE: This step not required if the Emergency Response Organization (ERO) and the local officials have already been notified.

6. Notify the System Dispatcher using the hotline (in the Control Room), the low-band radio link (TSC and Control Room), or normal telephone line (DELETED night or day).

SEC Initials

7. Notify the site NRC Resident Inspector (Extension 1254):

DELETED

SEC Initials

8. Notify the NRC Emergency Response Center via the ENS hotline. Use Form 3195 to assemble information which will be requested by NRC. Determine from the NRC whether or not continuous manning is required.

SEC Initials

WP/kk

ATTACHMENT 4 (Cont'd.)

Form 5790-104-4
Revision 8, 04/15/83
Page 5 of 5

EMERGENCY CALL LIST - ALERT/SITE AREA/GENERAL (Cont'd.)

NOTE 1: If the ENS is out of order, attempt contact in the following order until notification is made:

(a) Commercial Telephone System to NRC Operations Center (via Bethesda Central Office) 202/951-0550

(b) Commercial Telephone System to NRC Operations Center (via Silver Springs Central Office) 301/427-4056

(c) Health Physics Network (HPN) to NRC Operations Center *22 (Touch-Tone) or 22 (Rotary Dial)

(d) Commercial Telephone System to NRC Operator (via Bethesda Central Office) 301/492-7000

NOTE 2: Notification to be made within one hour of event declaration, as required by 10 CFR 50.72.

9. Notify INPO by commercial telephone at DELETED (Initial notification only.) _____ Sec. Initials

10. Notify ANI by commercial telephone at DELETED (Initial notification only.) _____ SEC Initials

11. Inform the Emergency Director of the completion of the notifications. _____ SEC Initials

Completed: Shift Emerg. Communicator _____ Date _____ Time _____

Reviewed by: Emergency Director _____

NOTE: After this checklist is completed and is not required for immediate use, it shall be placed in the appropriate container provided for Emergency Records.

WP/kk

Form 5790-102-6
Revision 8, 09/13/83
Page 1 of 2

ATTACHMENT 5

Example of
SECONDARY NOTIFICATION LIST

Backup Agencies That May Be Notified If Necessary

( ) 1. Chicago Operations Office of DOE
Radiological Assistance Program _____

( ) 2. Area Civil Defense Groups

a) Region VI Commander (St. Cloud) _____

b) Wright County _____

c) Sherburne County _____

( ) 3. State Highway Patrol

a) St. Cloud _____

b) Golden Valley
Emergency Radio _____

c) St. Paul or Special Operations and
Emergency Radio _____

( ) 4. Highway Department _____

( ) 5. Monticello Police Department _____

( ) 6. Monticello Fire Department _____

( ) 7. Burlington Northern Railroad
(Chief Dispatcher) _____

( ) 8. Minneapolis Water Department _____

( ) 9. St. Paul Water Department _____

( ) 10. Big Lake-Monticello Ambulance Service _____

( ) 11. Monticello-Big Lake Community Hospital _____

WP/kk

ATTACHMENT 5 (Cont'd.)

Form 5790-102-6
Revision 8, 09/13/33
Page 2 of 2

Example of
SECONDARY NOTIFICATION LIST (Cont'd.)

( ) 12. EPA Monticello Field Station _____

( ) 13. Big Oaks Park (During Camping Season) _____

( ) 14. Minnesota Pollution Control Agency _____

( ) 15. Northern States Power
N.W. Division _____
_____

( ) 16. General Electric _____

WP/kk

Form 5790-102-7
Revision 3, 01/15/83
Page 1 of 1

ATTACHMENT 6

Example of
EMERGENCY CLASSIFICATION CHANGE

Verify that the organization/person called is correct prior to relaying emergency information.

THIS IS _____, _____ AT THE
(Name) (Title)

MONTICELLO NUCLEAR GENERATING PLANT.

WE HAVE RE-CLASSIFIED THE EVENT AND ( ) Escalated
( ) Down-graded
( ) The Event May Be Terminated

TO a(N)

( ) Notification of Unusual Event

( ) Alert

( ) Site Area Emergency

( ) General Emergency

at _____ hours.
(Time)

METEOROLOGICAL CONDITIONS AT THE PRESENT TIME ARE AS FOLLOWS:

Wind Direction is from the _____ AT _____ MPH
(Direction)

Form of Precipitation _____
(If applicable)

THE AFFECTED SECTOR(S) IS(ARE) _____
(List sector(s) by letter designation)

Give a brief description of the emergency:

_____

_____

PLEASE RELAY THIS INFORMATION TO YOUR EMERGENCY ORGANIZATION PERSONNEL.

Emergency Director/Manager Approval _____
(Name/Date)

Emergency Communicator _____
(Name/Date)

WP/kk

Op. Com. Rev. Req'd. Yes X No ___
Q.A. Review Req'd. Yes ___ No X
ALARA Review Req'd. Yes ___ No X

RESPONSE TO AN EMERGENCY AT PRAIRIE ISLAND

A.2-702

Prepared by: RL Beuxe ALARA Review: Revision 0 Date 03/29/81
Reviewed by: GJ Mathieu Q.A. Review: Revision 0 Date 03/29/81
Operations Committee Final Review: Meeting Number 1225 Date 9/15/83
Approved by: [signature] Date 9/16/83
Op. Com. Results Review: Not Required Mtg. # 950 Date 03/27/81

PURPOSE

The purpose of this procedure is to provide instructions for the Monticello Nuclear Generating Plant Radiation Protection Group when called upon to respond to an emergency at Prairie Island. Also included is a list of the equipment required and a "priority list" of qualified Radiation Protection Specialists and their home telephone numbers.

CONDITIONS AND PREREQUISITES

A declared emergency exists at the Prairie Island site and conditions have made necessary a request for health physics support.

DISCUSSION

In an emergency situation which includes a release of radioactive materials to the environs, the process of off-site and environmental monitoring is limited by the personnel and equipment available for sampling, and to a lesser degree, by the facilities available for analysis. In an effort to enhance MNGP's capacity to handle this type of emergency, MNGP has made a reciprocal agreement with Prairie Island whereby each plant would supply personnel, equipment and analysis facilities to the other upon request.

PERSONNEL REQUIRED

Emergency Response Team

Supt., Radiation Protection or designee (Radiation Protection Support Supervisor)

Four (4) persons qualified in Radiation Protection

Standby Emergency Response Team

Supt., Radiation Protection or designee (Radiation Protection Support Supervisor)

Four (4) persons qualified in Radiation Protection

WP/kk

PROCEDURE

STEP 1 Upon notification that Prairie Island has requested assistance, the Supt., Radiation Protection or designee will organize an Emergency Response Team which will travel to Prairie Island immediately. The team shall consist of five people, four Radiation Protection Specialists and one person qualified as the Radiation Protection Support Supervisor.

NOTE 1: Refer to the "List of Qualified Radiation Protection Specialists/Support Supervisors", Attachment 1.

NOTE 2: A second Emergency Response Team consisting of four Specialists and one supervisor should be organized and standing by at the MNGP site to be dispatched if further assistance is requested.

STEP 2 The response team members should assemble at the MNGP site to pick up vehicle(s) and equipment.

NOTE 3: Other arrangements may be made if necessary as long as all equipment and personnel arrive at the Prairie Island EOF with a minimum of delay.

STEP 3 Proceed to the Monticello EOF and obtain the Emergency Survey Kits and equipment per "Prairie Island Emergency Support Equipment List", Attachment 2.

NOTE 4: If the Emergency Response Team is requested during off-normal hours obtain the keys for the Monticello EOF from the guard house.

NOTE 5: Prior to departing the Monticello EOF, response check all survey instruments and verify operability of the portable radios.

STEP 4 Proceed to the Prairie Island EOF.

NOTE 6: Directions to Prairie Island are as follows:

Highway I94 to I694, I694 to I494, I494 to 61, 61 south to 316 (in Hastings), left on 316 to 61, left on 61 to 18 (NSP-P.I. sign at this intersection), left on 18 to P.I. Detailed maps are included in the Emergency Kits.

STEP 5 When approaching the boundary of the Prairie Island 10 mile EPZ, attempt to contact the Prairie Island EOF using the portable radio. Identify yourself as the Monticello Survey Team.

WP/kk

STEP 6 If determined from the initial radio contact with the Prairie Island EOF that the plume may be encountered while enroute, conduct a search for the plume, in accordance with EPIP 1.1.10, and proceed directly to the EOF.

NOTE 7: If the EOF has NOT been activated or does not respond, contact the Prairie Island Radiological Emergency Coordinator for further instructions.

STEP 7 Upon arrival at the Prairie Island EOF contact the Emergency Manager or the Radiological Emergency Coordinator for further instructions.

STEP 8 Perform the required offsite surveys as requested by the Emergency Manager in accordance with EPIP 1.1.10, "Offsite Surveys" and EPIP 1.1.11, "Accident Assessment".

NOTE 8: Analysis of field samples should be performed in the Prairie Island EOF Count Room by P.I. Radiation Protection Specialists. If this facility becomes unavailable make arrangements to transport the samples to the P.I. Count Room (if available) or to Monticello.

REFERENCES

1. Prairie Island Nuclear Generating Plant Emergency Plan and Implementing Procedures

ATTACHMENTS

1. List of Qualified Radiation Protection Specialists/Support Supervisors
2. Prairie Island Emergency Support Equipment List

WP/kk

ATTACHMENT 1

QUALIFIED RADIATION PROTECTION SPECIALISTS

DELETED

DELETED

DELETED

DELETED

DELETED

DELETED

DELETED

DELETED

DELETED

DELETED

DELETED

DELETED

QUALIFIED RADIATION PROTECTION SUPPORT SUPERVISORS

DELETED

DELETED

WP/kk

ATTACHMENT 2

PRAIRIE ISLAND EMERGENCY
SUPPORT EQUIPMENT LIST

EQUIPMENT LOCATED AT THE MNGP SITE

Personnel TLD's and Direct Reading Dosimeters

Vehicle(s) for Offsite Monitoring Purposes

EQUIPMENT LOCATED AT THE MONTICELLO EOF

Three (3) Emergency Team Kits (including Duffel Bags)

Four (4) Portable Radios with Radio Boosters and Magnetic Antennas

NOTE: If the Response Team is requested during off-normal hours, obtain the keys for the EOF from the Guard House.

NOTE: Response check all survey instruments and verify the operability of the portable radios prior to leaving the EOF.

WP/kk