Exelon Generation.

RS-16-129
RA-16-049
TMI-16-057

May 26, 2016

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Braidwood Station, Units 1 and 2
Renewed Facility Operating License Nos. NPF-72 and NPF-77
NRC Docket Nos. STN 50-456, STN 50-457, and 72-73

Byron Station, Units 1 and 2
Renewed Facility Operating License Nos. NPF-37 and NPF-66
NRC Docket Nos. STN 50-454, STN 50-455, and 72-68

Calvert Cliffs Nuclear Power Plant, Units 1 and 2
Renewed Facility Operating License Nos. DPR-53 and DPR-69
NRC Docket Nos. 50-317 and 50-318

Calvert Cliffs Independent Spent Fuel Storage Installation
Materials License No. SNM-2505
NRC Docket No. 72-8

Clinton Power Station, Unit 1
Facility Operating License No. NPF-62
NRC Docket No. 50-461 and 72-1046

Dresden Nuclear Power Station, Units 1, 2, and 3
Facility Operating License No. DPR-2
Renewed Facility Operating License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-010, 50-237, 50-249, and 72-37

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373, 50-374, and 72-70

AX45
NMSS26
NRR
NMSS

Limerick Generating Station, Units 1 and 2
Renewed Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352, 50-353, and 72-65

Oyster Creek Nuclear Generating Station
Renewed Facility Operating License No. DPR-16
NRC Docket Nos. 50-219 and 72-15

Nine Mile Point Nuclear Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-63 and NPF-69
NRC Docket Nos. 50-220, 50-410, and 72-1036

Peach Bottom Atomic Power Station, Units 1, 2, and 3
Facility Operating [Possession Only] License No. DPR-12
Renewed Facility Operating License Nos. DPR-44 and DPR-56
NRC Docket Nos. 50-171, 50-277, 50-278 and 72-79

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254, 50-265, and 72-53

R.E. Ginna Nuclear Power Station
Renewed Facility Operating License No. DPR-18
NRC Docket Nos. 50-244 and 72-67

Three Mile Island Nuclear Station, Unit 1
Renewed Facility Operating License No. DPR-50
NRC Docket No. 50-289

Three Mile Island Nuclear Station, Unit 2
Facility Possession-Only License No. DPR-73
NRC Docket No. 50-320

Subject: Response to Request for Additional Information Regarding Requests to Withhold Emergency Preparedness Documents from Public Disclosure

Reference: Letter from U.S. Nuclear Regulatory Commission to Bryan C. Hanson (Exelon Generation Company, LLC) – *"Requests to Withhold Emergency Preparedness Documents from Public Disclosure,"* dated April 27, 2016 (ML16098A322)

On December 23, 2015, the U.S. Nuclear Regulatory Commission (NRC) issued Regulatory Issue Summary (RIS) 2015-17, *"Review and Submission of Updates to Final Safety Analysis Reports, Emergency Preparedness Documents, and Fire Protection Documents."* The RIS indicated that effective December 15, 2015, the NRC began proactively reviewing Emergency Preparedness (EP) and other documents for Sensitive,

Unclassified, Non-Safeguards Information (SUNSI) and, to the extent possible, making these documents publicly available.

Between December 15, 2015, and March 31, 2016, Exelon Generation Company, LLC (Exelon) submitted a number of EP-related documents requesting withholding from public disclosure in accordance with 10 CFR 2.390, *"Public inspections, exemptions, requests for withholding,"* indicating company confidential/proprietary and/or SUNSI material. A listing of the EP-related correspondence submitted during this time period is provided in Attachment 1 to this letter. This list of correspondence is comparable to the list provided by the NRC in the Reference letter with one addition as noted.

As a result of the recent process changes, the NRC has reviewed Exelon's withholding requests for the EP-related documents and supporting affidavits received since December 15, 2015. The affidavits request that the documents be withheld in their entirety; however, the NRC has determined that the supporting affidavits do not provide sufficient information to justify withholding these documents from public disclosure.

By letter dated April 27, 2016 (Reference), the NRC issued a Request for Additional Information (RAI) regarding the requests to withhold the submittal of certain EP-related documents from public disclosure. The RAI included several questions in which the NRC was requesting a response within 30 days of the date of the letter to further substantiate Exelon's request to withhold the documents from public disclosure. However, the NRC also stated that if specific documents are no longer considered to be proprietary, then a statement to that effect is sufficient, and a response to the specific questions is not needed for those documents. In addition, any resubmitted documents containing SUNSI material should be appropriately marked.

Exelon has reviewed the EP-related correspondence submitted between December 15, 2015, and March 31, 2016, as listed in Attachment 1. Although Exelon submitted the EP-related correspondence marked as company confidential/proprietary pursuant to 10 CFR 2.390, Exelon no longer considers these particular documents to be confidential/proprietary with the exception of the correspondence listed in the table below. The procedures listed in the table contain SUNSI material and should be withheld from public disclosure pursuant to 10 CFR 2.390. Attachments 2 through 4 contain copies of the procedures listed. The pages have been marked *"Security-Related Information - Withhold Under 10 CFR 2.390,"* as appropriate. Attachments 5 through 7 contain redacted versions of the procedures suitable for public disclosure. The procedures cited in the table below supersede those specific procedure revisions previously submitted.

Document Date	Document Number / Title
January 6, 2016	OP-NM-106-104, Revision 0, *"Security Contingency Event"* (SUNSI)
January 26, 2016	ERPIP-3.0, Revision 05900, *"Immediate Actions"* (SUNSI)
February 11, 2016	ERPIP-3.0, Revision 05901, *"Immediate Actions"* (SUNSI)

There are no regulatory commitments contained in this submittal.

If you have any questions concerning this submittal, please contact Richard Gropp at (610) 765-5557.

Respectfully,

James Barstow
Director, Licensing and Regulatory Affairs
Exelon Generation Company, LLC

Attachments:
1) Listing of EP-Related Documents Submitted
2) OP-NM-106-104, Revision 0, *"Security Contingency Event"* (SUNSI)
3) ERPIP-3.0, Revision 05900, *"Immediate Actions"* (SUNSI)
4) ERPIP-3.0, Revision 05901, *"Immediate Actions"* (SUNSI)
5) OP-NM-106-104, Revision 0, *"Security Contingency Event"* (Redacted)
6) ERPIP-3.0, Revision 05900, *"Immediate Actions"* (Redacted)
7) ERPIP-3.0, Revision 05901, "Immediate Actions" (Redacted)

cc: w/ Attachment 1 only
Regional Administrator - NRC Region I
Regional Administrator - NRC Region III
Director, NRC Division of Spent Fuel Storage and Transportation, ONMSS
NRC Senior Resident Inspector - Braidwood Station
NRC Senior Resident Inspector - Byron Station
NRC Senior Resident Inspector - Calvert Cliffs Nuclear Power Station
NRC Senior Resident Inspector - Clinton Power Station
NRC Senior Resident Inspector - Dresden Nuclear Power Station
NRC Senior Resident Inspector - LaSalle County Station
NRC Senior Resident Inspector - Limerick Generating Station
NRC Senior Resident Inspector - Nine Mile Point Nuclear Station
NRC Senior Resident Inspector - Oyster Creek Nuclear Generating Station
NRC Senior Resident Inspector - Peach Bottom Atomic Power Station
NRC Senior Resident Inspector - Quad Cities Nuclear Power Station
NRC Senior Resident Inspector - R.E. Ginna Nuclear Power Station
NRC Senior Resident Inspector - Three Mile Island Nuclear Station, Unit 1
NRC Project Manager, NRR - Braidwood Station
NRC Project Manager, NRR - Byron Station
NRC Project Manager, NRR - Calvert Cliffs Nuclear Power Station
NRC Project Manager, NRR - Clinton Power Station
NRC Project Manager, NRR - Dresden Nuclear Power Station
NRC Project Manager, NRR - LaSalle County Station
NRC Project Manager, NRR - Limerick Generating Station
NRC Project Manager, NRR - Nine Mile Point Nuclear Station
NRC Project Manager, NRR - Oyster Creek Nuclear Generating Station
NRC Project Manager, NRR - Peach Bottom Atomic Power Station

cc: w/ Attachment 1 only (continued)
NRC Project Manager, NRR - Quad Cities Nuclear Power Station
NRC Project Manager, NRR - R.E. Ginna Nuclear Power Station
NRC Project Manager, NRR - Three Mile Island Nuclear Station, Unit 1
Illinois Emergency Management Agency - Division of Nuclear Safety
Director, Bureau of Radiation Protection - Pennsylvania Department of Environmental Resources
Director, Bureau of Nuclear Engineering - New Jersey Department of Environmental Protection
Chairman, Board of County Commissioners of Dauphin County, PA
Chairman, Board of Supervisors of Londonderry Township, PA
Mayor of Lacey Township, Forked River, NJ
S. T. Gray, State of Maryland
A. L. Peterson, NYSERDA
R. R. Janati, Commonwealth of Pennsylvania

ATTACHMENT 1

Listing of EP-Related Documents Submitted

December 15, 2015, through March 31, 2016

Exelon Generation Company, LLC

Attachment 1
Listing of EP-Related Documents Submitted
December 15, 2015, through March 31, 2016

Document Date	Procedure Number / Title
December 15, 2015	EP-AA-112-F-01, Revision G, *"Command and Control Turnover Briefing Form"*
December 21, 2015	EP-AA-1010, Revision 11, *"Radiological Emergency Plan Annex for Oyster Creek Station"*
	EP-OC-1000, Revision 0, *"Oyster Creek Emergency Plan"*
January 6, 2016	OP-NM-106-104, Revision 0, *"Security Contingency Event" (SUNSI)*
January 14, 2016	EP-AA-1007, Addendum 3, Revision 2, *"Emergency Action Levels for Peach Bottom Atomic Power Station"*
January 26, 2016	EP-AA-112-100-F-50, Revision D, *"Shift Emergency Director Checklist (CNG)"*
	EP-AA-112-100-F-51, Revision C, *"Shift Communicator Checklist (CNG)"*
	EP-AA-112-100-F-54, Revision B, *"Security Shift Supervisor Checklist (CNG)"*
	EP-AA-112-100-F-57, Revision B, *"ERONS Notification Details (CNG)"*
	EP-AA-112-200-F-61, Revision B, *"Security Coordinator Checklist (CNG)"*
	EP-AA-112-400-F-50, Revision C, *"Corporate Emergency Director Checklist (CNG)"*
	EP-AA-112-400-F-54, Revision C, *"EOF Logistics Manager (CNG)"*
	EP-AA-122-100-F-22, Revision B, *"ERONS Activation for Call In and Drive In Drills"*
	EP-CE-114-100, Revision 2, *"Emergency Notifications"*
	EP-CE-113-F-03, Revision C, *"NMP Evacuation, Assembly and Accountability"*
	ERPIP-3.0, Revision 05900, *"Immediate Actions" (SUNSI)*
January 29, 2016	EP-AA-112-100-F-58, Revision C, "*CR Operations Communicator Checklist (CNG)"*
	EP-AA-112-200-F-67, Revision B, *"TSC Operations Communicator Checklist (CNG)"*
	EP-AA-112-300-F-57, Revision C, *"OSC Operations Communicator Checklist (CNG)"*
February 11, 2016	EP-AA-1007, Addendum 3, Revision 3, *"Emergency Action Levels for Peach Bottom Atomic Power Station"*
February 11, 2016	ERPIP-3.0, Revision 05901, " Immediate Actions" *(SUNSI)*
February 11, 2016 (Additional Item)	EP-AA-112-300-F-05, Revision C, *"Braidwood OSC Suggested Configuration"*
February 11, 2016	EP-AA-1005, Addendum 3, Revision 1, *"Emergency Action Levels for LaSalle County Station"*
February 26, 2016	EP-AA-1011, Addendum 3, Revision 1, *"Calvert Cliffs Nuclear Power Plant Emergency Action Levels"*
March 14, 2016	EP-AA-1001, Addendum 3, Revision 1, *"Emergency Action Levels for Braidwood Station"*
March 14, 2016	EP-AA-1002, Addendum 3, Revision 1, *"Emergency Action Levels for Byron Station"*
March 22, 2016	EP-AA-1013, Revision 1, *"Exelon Nuclear Radiological Emergency Plan Annex for Nine Mile Point Station"*

Attachment 1
Listing of EP-Related Documents Submitted
December 15, 2015, through March 31, 2016

Document Date	Procedure Number / Title
March 23, 2016	EP-AA-1004, Addendum 3, Revision 2, *"Emergency Action Levels for Dresden Station"*
March 28, 2016	EP-AA-1006, Addendum 3, Revision 2, *"Emergency Action Levels for Quad Cities Station"*
March 28, 2016	EP-AA-1003, Addendum 3, Revision 1, *"Emergency Action Levels for Clinton Station"*

ATTACHMENT 5

OP-NM-106-104, Revision 0, *"Security Contingency Event"*

(Redacted)

SECURITY CONTINGENCY EVENT

1.0 PURPOSE

A. To describe actions in response to those security events that poses a credible threat to the security of the station and may result in the classification and declaration of an emergency per EP-CE-111, Emergency Classification and Protective Action Recommendations.

B. To detail actions to be taken upon a change in the NTAS threat conditions.

C. This procedure applies to all personnel assigned at Nine Mile Point Nuclear Station with specific or additional requirements for those assigned to the Emergency Response Organization (ERO).

2.0 TERMS AND DEFINITIONS

2.1. Aircraft Imminent Threat

A threat that meets one of the following conditions:

A. A large-threat aircraft is heading toward and is within 5 minutes of a site, and an altitude change aligns a large-threat aircraft with a site.

B. A large-threat aircraft is locally observed.

C. A site receives specific, credible intelligence that a small aircraft heading toward the site presents a greater threat than its size would indicate, and the estimated time to site is 5 minutes or less.

2.2. Aircraft Informational Threat

A threat that meets one of the following conditions:

A. A large-threat aircraft is heading toward but is greater than 30 minutes from a site.

B. The threat is a small aircraft, and the site has either observed the threat aircraft locally or has not received specific, credible intelligence information that the aircraft presents a threat greater than its size would indicate.

2.3. Aircraft Probable Threat

A threat that meets one of the following conditions:

A. A large-threat aircraft is heading toward and is greater than 5 minutes, but less than 30 minutes from a site.

B. A site receives specific, credible intelligence that a small aircraft heading toward the site presents a greater threat than its size would indicate, and the estimated time is greater than 5 minutes, but less than 30 minutes.

2.4. Credible

Information received from a source determined to be reliable (for example, NMP Security, law enforcement, government agency, and so forth) or has been verified to be true. A threat can be verified to be true or considered credible when:

A. Supporting physical evidence exists for the threat.

B. Information independent from the actual threat message exists that supports the threat.

C. Source of threat information is verified and known to be credible.
(for example, FBI, NRC, NORAD, local law enforcement agency, and so forth.)

2.5. Hostile Action

An act toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. Hostile action should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the nuclear power plant. Non-terrorism-based EALs should be used to address such activities, (for example, violent acts between individuals in the Owner Controlled Area).

2.6. Level 2 Security Alert

Declaration of a Level 2 Security Alert is based upon observation of compelling physical evidence or activity that substantiates actual existence of a credible security related threat involving a Hostile Action.

2.7. National Threat Advisory System (NTAS)

The NTAS is a two level threat advisory system administered by the Department of Homeland Security. It began in 2011 as a result of Presidential Directive PPD-7. The two threat levels are as follows:

A. Elevated Alert

An ELEVATED ALERT warns of a credible terrorist threat against the United States and its territories that is general in both timing and target, or details significant trends and developments in terrorism such that it is reasonable to recommend implementation of protective measures to thwart or mitigate an attack.

B. Imminent Alert

An IMMINENT ALERT warns of a credible, specific, and impending terrorist threat against the United States and its territories that is sufficiently specific and credible to recommend implementation of additional protective measure to thwart or mitigate an attack.

2.8. Security Condition

Any security event as listed in the approved security plan that constitutes a threat/compromise to site security, threat/risk to site personnel, or a potential degradation to the level of safety of the plant. A Security Condition does not involve a Hostile Action.

2.9. Security Event

Any incident representing an attempted, threatened, or actual breach of the security system or reduction of the operational effectiveness of that system. A security event can result in either a Security Condition or Hostile Action.

2.10. Two-Person Vital Area Access Rule

A rule for remaining in or accessing the vital area following the determination by Security of a site-specific credible security threat. The rule consists of ensuring that there is no one left alone in the vital area. The rule requires personnel in the vital area to have partners who must remain in line of sight of each other while in the vital area while the rule is in effect, and only permits entry to vital areas when it is required for essential work (work required for safe plant operation or to ensure health and safety of the public).

3.0 RESPONSIBILITES

3.1. Shift Manager/Emergency Director (SM/ED)

A. Ensure security is notified of actual/suspected security events.

B. Ensure personnel on-site are provided appropriate warning and directed to take appropriate actions.

C. Coordination, as required between Operations and Security forces to ensure the safe operation or safe shutdown of the plant.

D. Emergency is classified and declared per EP-CE-111, as required.

E. The NRC is notified per 10 CFR 50.72 when required.

F. Those actions required for a change in NTAS threat conditions are implemented and documented.

3.2. Corporate Emergency Director (ED)

A. Relieves the SM/ED following activation of the Emergency Response Facilities.

B. Assumes overall command and control of the emergency.

C. Ensures coordination between the Security force and the remainder of the Emergency Response Organization.

D. Performs actions as required by EP-AA-112-400, Emergency Operations Facility Activation and Operation.

3.3. Control Room Operator (CRO)

A. Makes necessary emergency announcements as directed by the SM.

B. Assists in coordination between Operations department and the Security force.

C. Monitors plant operation for unusual activity.

D. Notifies SM/ED and Security department of any actual/suspected Security Events.

3.4. Security Shift Supervisor or General Supervisor Security Operations

A. Assumes the role of the Security Coordinator.

B. Ensures necessary actions are taken to ensure the security of the station and personnel.

C. Ensures coordination between Security forces and the remainder of the Emergency Response Organization.

D. Obtains assistance as necessary from local law enforcement agencies (LLEA).

E. Ensures Incident Command Post (ICP) trailer is available and provided to LLEA, if necessary.

F. Provides for the protection of systems and components as required to ensure safe operation or safe shutdown capability is maintained.

G. Responsible for recommending implementation of the two-person vital area access rule upon determining existence of a site-specific credible security threat.

H. Ensures that security-related actions required for a change in NTAS threat conditions are implemented and documented.

3.5. Station Personnel

A. Report the discovery of actual/suspected security events to the Control Room and take actions specified by emergency announcements.

B. When the emergency announcement is made to implement the two-person vital area access rule, take actions per this procedure.

C. Upon hearing Ground Attack Announcement, Attachment 5, take the appropriate actions.

3.6. Director Security

A. Ensures that Security-related actions required for a change in NTAS threat conditions are implemented and documented.

3.7. Emergency Preparedness Manager

A. Ensures that Emergency Preparedness-related actions required for a change in NTAS threat conditions are implemented and documented.

3.8. Corporate Communications Representative

A. Ensures that Corporate Communications-related actions required for a change in NTAS threat conditions are implemented and documented.

3.9. Operations Manager

A. Ensure that Operations-related actions required for a change in NTAS threat conditions are implemented and documented.

3.10. Key Emergency Response Organization Personnel

A. Ensure that ERO related actions required for a change in NTAS threat conditions are implemented and documented.

4.0 MAIN BODY

4.1. Response to Security Event

A. Shift Manager/Emergency Director **OR** Corporate Emergency Director, **COMPLETE** actions as required by Attachment 3, Security Event SM/ED or ED Flowchart.

B. Control Room Operator, **COMPLETE** actions per Attachment 2, Security Event - CRO Checklist.

C. All other personnel within the Owner Controlled Area (protected area included) **PERFORM** the following:

1. Upon hearing the announcement indicating the site is being attacked, Attachment 5, Ground Attack Announcement:

   a. **STAY AWAY** from windows **OR** other openings.

   b. **MINIMIZE** any movement.

   c. **CONCEAL** yourself
   IF unsafe at present location,
   THEN CONCEAL yourself at a nearby safe location.

   d. **TAKE** additional actions as directed by Security **OR** plant announcement.

   e. ERO personnel, **REMAIN** at present location **UNTIL** instructed to report (**WHEN** safe).

2. Upon hearing the Imminent/Probable Aircraft Attack Announcement, Attachment 6, Aircraft Attack Announcement:

   a. **EVACUATE** the protected area immediately with urgency using the closest possible security egress point.

   b. **LEAVE** immediately, **DO NOT** go to your lockers, **OR** your desk.

   c. **CARD OUT**.

   d. ERO personnel are expected to evacuate the protected area.
   EOF/JIC responders **REPORT** to the EOF/JIC.
   [[
   ]]

   e. [[
   ]]

   f. On-shift Operators **REPORT** to the Control Room.
   On-shift Operators **NOT** involved in Control Room operation **REPORT** to the closest Security building.

   g. Off-shift Operators **REPORT** to Security East, B.5.b equipment staging area.

   h. On-shift RP **AND** Chemistry technicians **REPORT** to the closest Security building interior **AND** standby.

3. **IMMEDIATELY REPORT** the discovery of actual/suspected security events to the Control Room.

4.1 (Continued)

D. Security Shift Supervisor, upon notification of a security event, **IMPLEMENT** actions per Nuclear Security procedures **AND** Attachment 1, Security Event Security Shift Supervisor Flowchart **[N0445]**

4.2. Two-Person Vital Area Access Rule

The Two-Person Vital Area Access Rule shall be implemented upon determination that there exists a site-specific credible security threat **OR** receipt of other site-specific credible information.

A. Personnel in Vital Areas: **WHEN** an announcement is made that two-person line of sight vital area access rules are in effect, **TAKE** the following actions as appropriate:

1. **IF** you are performing non-essential work (**OR** are unsure), **THEN**
   a. **PLACE** your work in a safe configuration.
   b. **LEAVE** the area.
   c. **DO NOT** return **UNTIL** the event is terminated.
2. **IF** you are within a vital area **AND NO** one is working with you **OR** is nearby, **THEN**
   a. As applicable, **PLACE** the job in a safe configuration.
   b. **EXIT** the vital area, carding out as you exit.
   c. **BEFORE** re-entering the vital area, **SEEK** out a partner to accompany you while in the vital area.
   d. **REMEMBER** the following concerning your partner:
      - Equal task qualification levels are **NOT** necessary.
      - Partner must remain within line of sight the entire time you are in the vital area.
      - Partner must have access to the vital area.
3. **IF** you are within a vital area **AND** someone else is working with you **OR** is nearby, **THEN**
   a. **IF** you both can perform your tasks **WHILE** remaining in line of sight with each other, **REMAIN** at task.
   b. **REMEMBER** the following concerning your partner
      - Equal task qualification levels are not necessary.
      - Partner must remain within line of sight the entire time you are in the vital area.
      - Partner must have access to the vital area.
   c. **IF** you **CANNOT** remain in line of sight take actions as specified in 4.2.A.2

4.2.A (Continued)

4. **IF** you are **NOT** in a vital area **WHEN** the announcement is made, **BUT** subsequently need to enter for essential work **WHILE** the two-person rule is in effect,
THEN

   a. **BEFORE** entering, **SEEK** out a partner to accompany you while in the vital area.

   b. **REMEMBER** the following concerning your partner:

      - Equal task qualification levels are not necessary.
      - Partner must remain within line of sight the entire time you are in the vital area.
      - Partner must have access to the vital area.

5. **IMMEDIATELY REPORT** any suspicious behavior to the Control Room.

4.3. Response to Change in NTAS Threat Condition

NOTE

When in an NTAS IMMINENT ALERT threat condition, verify that all actions required for an ELEVATED ALERT threat level are complete and documented.

A. The following personnel **SHALL ENSURE** that the actions provided within Attachment 4, NTAS Alert Actions, are carried out as soon as possible following notification of a change to the NTAS threat condition:

1. Security Shift Supervisor
2. Director Security
3. Emergency Preparedness Manager
4. Corporate Communications Representative
5. Manager Operations Unit 1 **AND** Unit 2
6. Key Emergency Response Organization Personnel
7. Shift Manager Unit 1 **AND** Unit 2

5.0 DOCUMENTATION

5.1. BASES

[N0445] NCTS 504628-00, Implement and close B.5.b Phases 2 & 3.

5.2. RECORDs

A. The following records generated by this procedure shall be maintained by Records Management for the Permanent Plant File per RM-AA-101, Records Management Program:

> **NOTE**
>
> This only applies if records are generated as the result of an actual declared emergency or change in NTAS Threat Condition at the Nine Mile Point Nuclear Station.

- Attachment 2, Security Event - CRO Checklist
- Records generated as a result of a change in NTAS Threat Condition, EXCEPT security related records classified as Safeguards Information, which will be maintained in the Security Records Center.

B. The following records generated by this procedure are not required for retention in the Permanent Plant File:

> **NOTE**
>
> This only applies when records are not the result of an actual declared emergency.

- Attachment 2, Security Event - CRO Checklist

6.0 REFERENCES

6.1. Developmental References

A. 10CFR50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors

B. 10CFR73.55, Requirements for Physical Protection of Licensed Activities in Nuclear Power Reactors Against Radiological Sabotage

C. NUREG/CR - 4093, Safety/Safeguards Interactions During Safety-Related Emergencies at Nuclear Power Reactor Facilities

D. NRC RIS 2002-12A, Power Reactors, NRC Threat Advisory System

E. NRC IN 2009-08, NRC Rapid Notification of Licensees Following a Physical Attack against a Facility

F. NRC SA-05-02

G. NRC SA-05-04

H. Nine Mile Point Nuclear Station Physical Security and Safeguards Contingency, and Security Training and Qualification Plan

6.1 (Continued)

I. Nine Mile Point Site Emergency Plan

J. Barrier Analysis, OE-2009-001642

K. OP-NM-106-300, Personnel Injury or Illness

L. S-SEC-8.1, Security Alert and Heightened Security

6.2. Performance References

A. EP-CE-111, Emergency Classification and Protective Action Recommendations

B. EP-CE-113, Personnel Protective Actions

C. EP-CE-114-100, Emergency Notifications

D. EP-AA-112, Emergency Response Organization (ERO) / Emergency Response Facility (ERF) Activation and Operation

E. EP-AA-112-100, Control Room Operations

F. EP-AA-112-600, Public Information Organization Activation and Operation

G. EP-AA-112-400, Emergency Operations Facility Activation and Operation

H. EP-AA-112-200, TSC Activation and Operation

I. EP-AA-112-300, Operations Support Center Activation and Operation

J. EP-CE-115, Termination and Recovery

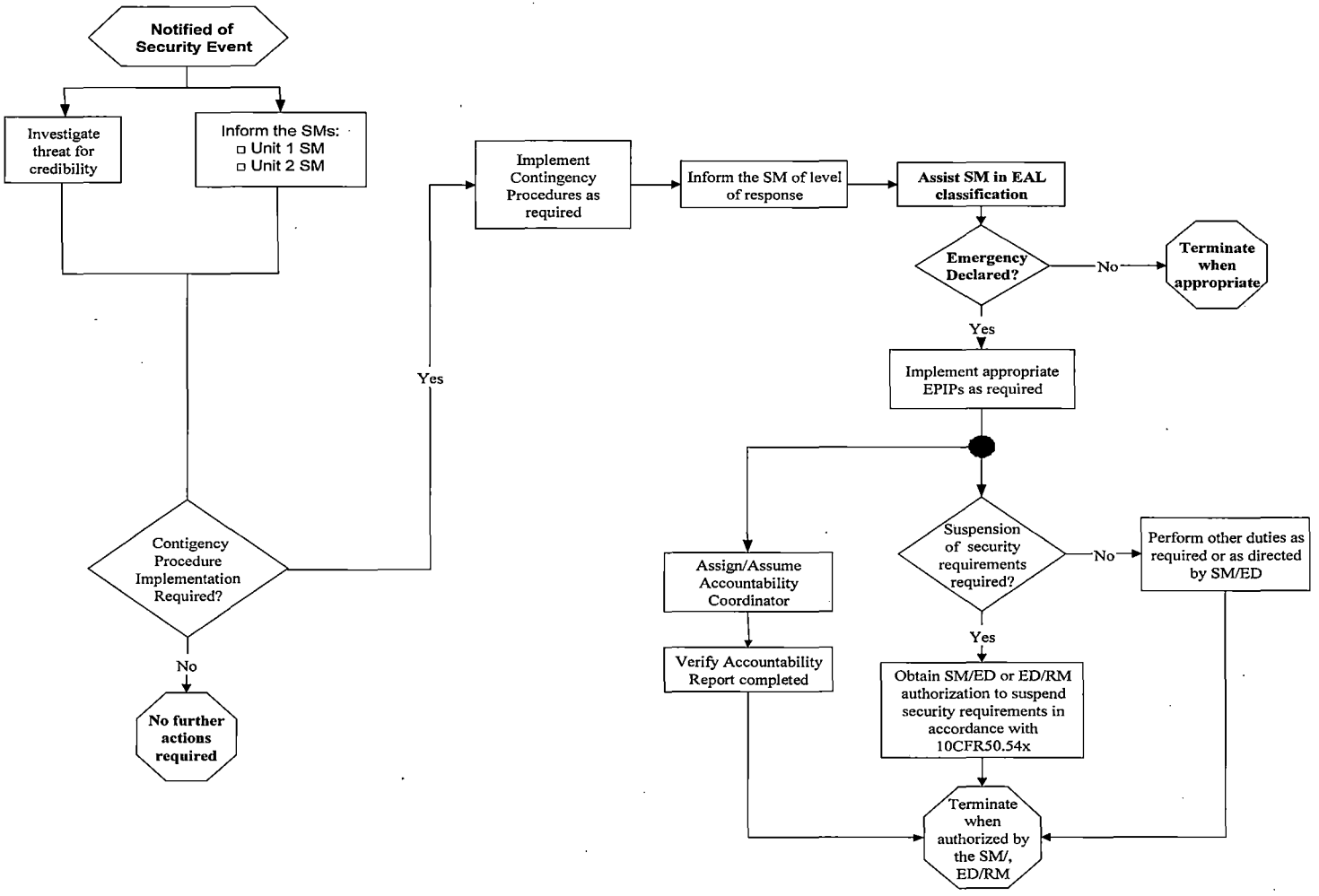
K. OP-NM-201-005, Firefighting

L. OP-NM-103-102, Watch-Standing Practices at Nine Mile Point

7.0 ATTACHMENTS

- Attachment 1, Security Event Security Shift Supervisor Flowchart **[N0445]**
- Attachment 2, Security Event - CRO Checklist
- Attachment 3, Security Event SM/ED or ED Flowchart
- Attachment 4, NTAS Alert Actions
- Attachment 5, Ground Attack Announcement
- Attachment 6, Aircraft Attack Announcement
- Attachment 7, NRC Authentication Process

Attachment 1, Security Event Security Shift Supervisor Flowchart [N0445]



Attachment 2, Security Event - CRO Checklist

Name	Date	Unit ☐ 1 ☐ 2

		Complete	N/A
1.0	Notified of actual/suspected security event	☐	☐
2.0	**NOTIFY** SM	☐	☐
3.0	**CHECK** plant parameters	☐	☐
4.0	**NOTIFY** Security Shift Supervisor (X5222/2591)	☐	☐
5.0	**INITIATE** any Operating, Special Operating, **OR** EOPs required	☐	☐
6.0	As directed by the SM, **MAKE** announcements:	☐	☐
7.0	**WHEN** Security Event **NO** longer exists, **THEN** make a termination announcement **PER** EP-CE-115, Termination and Recovery	☐	☐
8.0	Emergency Event terminated	☐	☐

Attachment 3, Security Event SM/ED or ED Flowchart

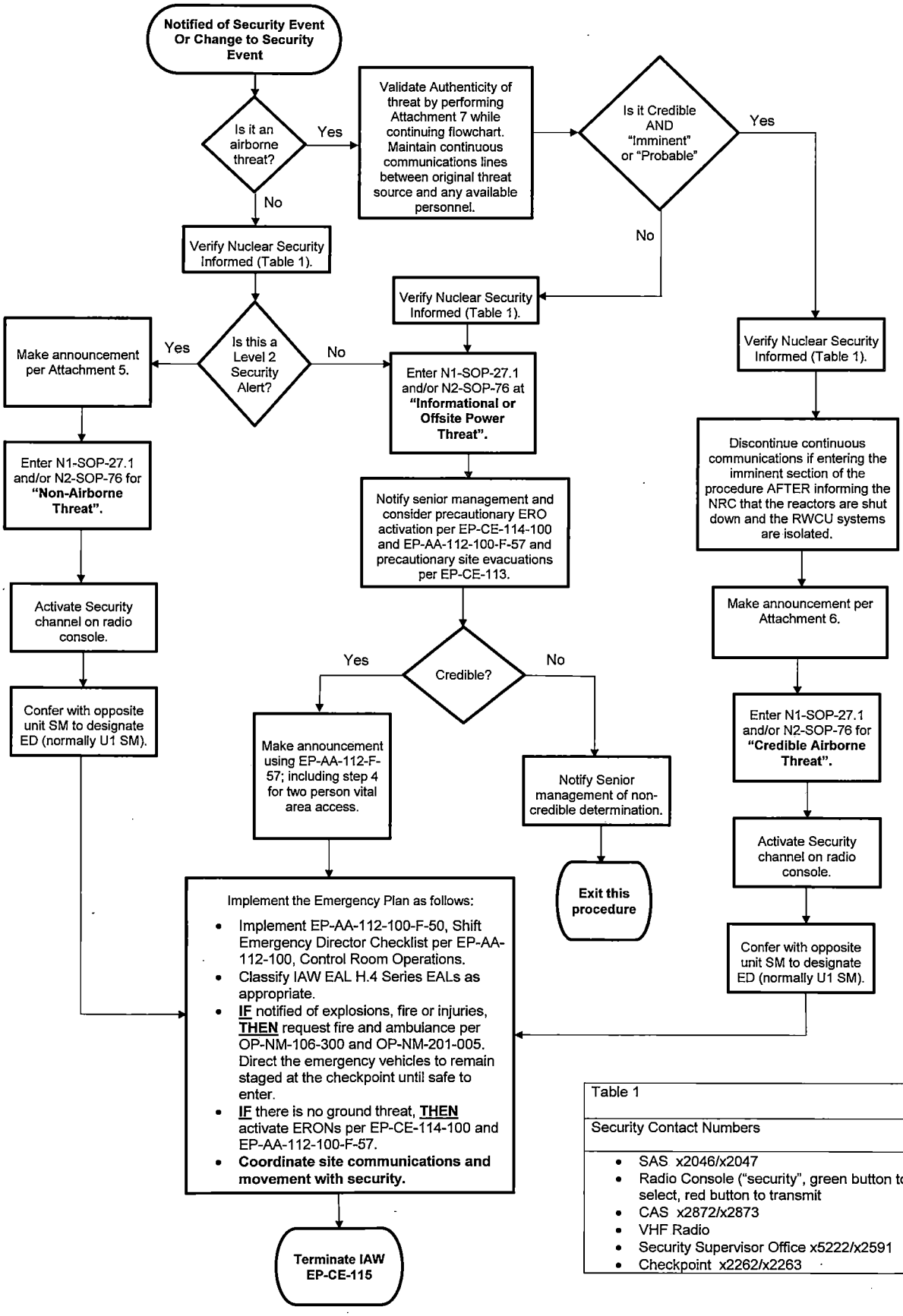


Table 1
Security Contact Numbers
• SAS x2046/x2047 • Radio Console ("security", green button to select, red button to transmit • CAS x2872/x2873 • VHF Radio • Security Supervisor Office x5222/x2591 • Checkpoint x2262/x2263

Attachment 4, NTAS Alert Actions

NTAS ELEVATED ALERT CONDITION
SECURITY SHIFT SUPERVISOR 1. **CONFIRM** change to NTAS ELEVATED ALERT condition 2. **INFORM** the following: • Director Security • Unit 1 **AND** Unit 2 SM 3. **IMPLEMENT** applicable Security Branch procedures
DIRECTOR SECURITY 1. **IMPLEMENT** any actions associated with a NTAS ELEVATED ALERT threat condition contained in Security procedures **AND** guidance 2. **CONTACT** the following **AND PROVIDE** briefing • Corporate Manager Nuclear Safety & Security • VP NMP • Nuclear Communications and Public Affairs • Director Emergency Preparedness 3. **PROVIDE** enhanced priority to maintenance of Security-related systems.
UNIT 1 AND UNIT 2 SMs 1. **NOTIFY** Operations Managers **AND** Plant Manager of change to NTAS ELEVATED ALERT threat condition
EMERGENCY PREPAREDNESS MANAGER 1. **DOCUMENT** the date **AND** time of notification. 2. **DEVELOP / MAINTAIN** a list of Key ERO members utilizing the appropriate procedures. 3. **REVIEW** the Severe Accident Management Guides for completeness for those strategies that could be used to address the impact of a terrorist threat. 4. **ALERT** state **AND** local emergency management personnel. • **VERIFY** their continued capability to respond to emergencies at Nine Mile Point • **INFORM** them of any activities we are implementing 5. **ENSURE** the continued ability to activate the Emergency Response Organization (**VERIFY** pager operability) **AND** the Emergency Response Facilities (**VERIFY** they continue to be ready). 6. **COMMUNICATE** with the Director Security to determine if any additional responders from off-site agencies are being used **AND ENSURE**: • Emergency worker training/qualification has been provided • Dosimetry will be provided in the event of an emergency • These personnel understand their actions in the event of a declared emergency • These personnel understand when to evacuate 7. Within 30 days **ENSURE** the emergency plan is in a full state of readiness by completing a re-evaluation **OR** retest of the following: (**UNLESS** documentation is available of the re-test completion within previous 30 days) • ERO response capability (use monthly notification drill as proof of compliance) • ERF's (use monthly ERF inspection as proof of compliance) • Communications (use monthly surveillance tests as proof of compliance) • Sirens (use bi-weekly test as proof of compliance) 8. **RE-REVIEW** the effects of nearby hazmat facilities (dams **AND** so forth) on operation of facility. (**SEE** FSAR **AND** Security ICM response for details) 9. **ADVISE** hospitals (Oswego **AND** University) to be prepared in case of an attack at station for receipt of injured personnel with injuries consistent with a hostile attack.

Attachment 4, NTAS Alert Actions (Continued)

NTAS ELEVATED ALERT CONDITION
EMERGENCY PREPAREDNESS MANAGER (Continued) 10. **CONSIDER** implementing any additional communication protocols for federal, state, **AND** local authorities. 11. **REVIEW** the interfacing documents (OP-NM-106-104, OP-NM-201-005, OP-NM-103-102) to ensure **NO** over-lap of duties with respect to Operations/Security/Fire Brigade/EP, **PROVIDE** memo to file indicating completion of review. 12. **VERIFY** communications capability with NRC (test ENS **AND** HPN lines), state **AND** local authorities (test RECS **AND** backup telephones), **AND** DOE (Oakridge - REAC/TS, per letter of agreement), **DOCUMENT** results. 13. **PROVIDE** email **AND** voice mail to ERO indicating the need to remain vigilant. 14. **CONSIDER** requesting support as needed from State/Local/Federal authorities. **PROVIDE** memo to file indicating additional support required **OR NOT** required.
KEY EMERGENCY RESPONSE ORGANIZATION 1. **NO** additional actions, normal state of readiness. **IF** an event is declared **AND** staffing is directed **THEN PERFORM** actions per applicable procedures.
CORPORATE COMMUNICATIONS REPRESENTATIVE 1. **PREPARE AND DISTRIBUTE** communications to site personnel as needed, obtaining concurrence from: • VP NMP • Director Nuclear Security
OPERATIONS MANAGER 1. **PROVIDE** enhanced priority for maintenance activities related to Fire Protection systems. 2. **CONSIDER** terminating all non-essential construction **AND** maintenance activities. 3. **CONSIDER** limiting access to hazardous material storage areas **AND/OR** the quantities of hazardous materials stored within the protected area. **COORDINATE** with Security as needed.

Attachment 4, NTAS Alert Actions (Continued)

NTAS IMMINENT ALERT CONDITION

VERIFY that all actions required for an ELEVATED ALERT condition are complete AND documented.

SECURITY SHIFT SUPERVISOR

1. **CONFIRM** change to NTAS IMMINENT ALERT condition
2. **INFORM** the following:
   - Director Security
   - Unit 1 and Unit 2 SM
3. **IMPLEMENT** applicable Security Branch procedures

DIRECTOR SECURITY

1. **IMPLEMENT** any actions associated with an NTAS IMMINENT ALERT threat condition contained in Security procedures **AND** guidance
2. **CONTACT** the following **AND PROVIDE** briefing
   - Director Regulatory Assurance
   - VP NMP
   - Nuclear Communications and Public Affairs
   - Director Emergency Preparedness

UNIT 1 AND UNIT 2 SM

IF at any time the threat is determined to be site specific **THEN**:

1. **IMPLEMENT** actions per OP-NM-106-104, Step 4.1.
2. **NOTIFY** Operations Managers **AND** Plant Manager of change in NTAS threat condition.
3. **STAND** by to receive requests for plant status information from the TSC **AND** EOF.

   EVEN IF the threat does **NOT** involve a credible site-specific threat, **THEN** Emergency Preparedness **WILL TAKE ACTIONS** to staff the emergency facilities with key personnel.

EMERGENCY PREPAREDNESS MANAGER

1. **DOCUMENT** the date **AND** time of notification.
2. **CONTACT** Key ERO members **AND DIRECT** them to staff all emergency facilities within approximately 60 minutes.
3. **STAFF** the EOF with one EP staff member within approximately 60 minutes.
4. **DEVELOP** a schedule to assure continuous staffing of the EOF with **AND** EP staff member.
5. **IF THREAT IS SITE SPECIFIC AND CREDIBLE, VERIFY SM/ED:**
   - **IMPLEMENTS** OP-NM-106-104, Security Events
   - **DECLARES** an Unusual Event per EP-CE-111.
   - **IMPLEMENTS** Activation of the Emergency Plans
   - **IMPLEMENTS** an Exclusion Area Evacuation.

Attachment 4, NTAS Alert Actions (Continued)

NTAS IMMINENT ALERT CONDITION

Verify that all actions required for lower scale threat levels are complete and documented.

KEY EMERGENCY RESPONSE ORGANIZATION

IF an actual emergency is declared **AND** staffing is directed **THEN PERFORM** actions per EPs:

1. **WHEN** notified to staff the emergency facilities, **DO SO** within approximately 60 minutes
2. **COMPLETE** activation checklist for each facility, **BUT DO NOT** take over any functions from the Control Room.
3. **DEVELOP** a schedule to assure continuous staffing of key positions in each emergency facility assuming 12 hour shift duration for 4 days
4. **IF** additional assistance is needed, **THEN CONTACT** the EP Liaison in the EOF for:
   - Additional direction
   - Logistical needs (equipment repair, supplies, food, additional support)
5. **PERFORM AND SUPPORT** actions requested by the Control Rooms
6. **MAINTAIN** a log of events
7. JIC Manager **SHALL PERFORM**:
   - **PERFORM** media monitoring to assess events pertinent to the ERO
   - **BRIEF** emergency facility leads on the above
8. Corporate Emergency Director **SHALL BRIEF** the following of the situation **AND** actions taken:
   - NRC Resident
   - Oswego County Director of Emergency Management
   - New York State Warning Point
   - Site Leadership (use EOF Conference line if needed)
9. **PERIODICALLY** assess emergency facility staffing levels **AND ADJUST** as needed
10. **WHEN** the NTAS threat de-escalates, stand down emergency facilities after consultation with Director Security
    a. **IF** the SM had activated the emergency plan, **THEN PERFORM** actions per appropriate procedures
    b. **IF** the NRC Security Level threat de-escalates **AND** the SM had **NOT** activated the emergency plan, **THEN**:
       - **RETURN** the emergency facility to standby condition
       - **FORWARD** all logs to EP

CORPORATE COMMUNICATIONS REPRESENTATIVE

1. **BRIEF** emergency facility managers per the above actions
2. **PREPARE AND DISTRIBUTE** communications to site personnel as needed. Such communications should have concurrence of the:
   - EOF Emergency Directors for all ERO Teams
   - Director Nuclear Security

OPERATIONS MANAGER

1. **IF** threat is site specific **AND** credible, **THEN VERIFY** staffing plans that assure safe plant operation is maintained.
2. **CONSIDER** returning all unavailable safety systems to available status.
3. **NOTIFY** current staff **AND** those in close proximity to the site that have current licenses **OR** have held licenses previously that they may be called upon in an emergency to perform Operations type activities.

Attachment 5, Ground Attack Announcement

Date:_____

Time:_____

GROUND ATTACK ANNOUNCEMENT

Instructions:

1. **PLACE** Gaitronics in Merge.
2. **IF** the event is a drill, **MAKE** the following announcement before sounding the station alarm:

   "This is a drill, this is a drill."
3. **SOUND** Station Alarm for five (5) seconds.
4. **ANNOUNCE**,

   "Attention All Plant Personnel, this (is a drill / is an actual emergency).
   The site is under attack, take cover immediately.
   I repeat, this (is a drill / is an actual emergency)."
5. **REPEAT** Alarm **AND** Announcement.
6. **LEAVE** Gaitronics in Merge for the duration of the event.
7. Upon completion, **RETURN** this attachment to the EP Dept.

Attachment 6, Aircraft Attack Announcement

Date:_____
Time:_____

AIRCRAFT ATTACK ANNOUNCEMENT

Instructions:

1. **PLACE** Gaitronics in Merge.
2. **IF** the event is a drill, **MAKE** the following announcement before sounding the station alarm:

   "This is a drill, this is a drill."
3. **SOUND** Station Alarm for five (5) seconds.
4. **ANNOUNCE**,

   "Attention, Attention all personnel, this is (a drill) (an actual emergency).

   [[

   ]]

   I repeat, this is (a drill) (an actual emergency)."
5. **REPEAT** Alarm **AND** Announcement.
6. **LEAVE** Gaitronics in Merge for the duration of the event.
7. Upon completion, **RETURN** this attachment to the EP Dept.

Attachment 7, NRC Authentication Process

NOTE

- If a licensee encounters a situation where multiple entities are providing the same threat information (for example, FAA, NORAD, and the NRC HQ Operations Center), the licensee can choose to maintain continuous communication with only the NRC HQ Operations Center.
- Licensees should maintain continuous communication with the NRC HQ Operations Center to facilitate the exchange of real-time information. The licensee can discontinue communication with the NRC HQ Operations Center after it has entered the Imminent section(s) of its procedure(s) and provided the NRC HQ Operations Center with positive confirmation of the following:

  a) Site Security and remaining onsite personnel have been notified or provided updated threat information.
  b) OROs (for example, fire, medical, or law enforcement organizations) have been contacted or provided updated threat information.
  c) Reactors have been shut down, and
  d) For boiling water reactors, the reactor water cleanup system, (or similar systems) or isolation condensers have been isolated.

1.0 OUTGOING CALL TO NRC:

1.1 **NOTIFY** the NRC within fifteen minutes of the security threat/event as follows:

a. The Shift Manager (SM) notifies the USNRC Operations Center. The Emergency Notification Red Phone is preferred, but any available phone may be used.

- 301-816-5100
- 301-951-0550
- 301-415-0550

1.2 The SM **STATES** that the licensee has information regarding an on-site security threat, **AND** states the authentication code.

1.3 **AFTER** the NRC has verified the code, the SM **RELAYS** the information, limited to:

- Site name
- Emergency Classification
- Nature of threat (assault by land, water, **OR** air) **AND** status (imminent, in-progress, **OR** repelled).

Attachment 7, NRC Authentication Process (Continued)

2.0 INCOMING CALL FROM NRC:

2.1 NRC Headquarters Operations Office (HOO) calls the affected licensee.

2.2 **WHEN** the licensee answers the phone, the HOO will state it has an Emergency Aircraft Imminent Threat Warning Message **OR** a Nuclear Power Plant Attack Threat Message **AND GIVE** the authentication code.

2.3 The licensee **WILL VERIFY** the code **AND REPLY** that the licensee is ready to copy the emergency message.

2.4 **IF** incorrect code is given, the licensee **WILL HANG** up,
THEN IMMEDIATELY CALL BACK the NRC HOO.
NO code word will be used for the call back.

2.5 An example of the expected exchange during an imminent threat report is shown below:

NRC HOO: "This is the NRC Operations Officer, I have an Emergency Aircraft Imminent Threat Warning Message; the authentication code is Alpha One Bravo Yankee."

Licensee: Checks current authentication code, and if correct responds: "Authentication confirmed"; "standing by for warning message; go ahead NRC."

ATTACHMENT 6

ERPIP-3.0, Revision 05900, *"Immediate Actions"*

(Redacted)

Calvert Cliffs Nuclear Power Plant
TECHNICAL PROCEDURE

ERPIP-3.0

IMMEDIATE ACTIONS

Revision 05900

This Procedure is EXEMPT from 10 CFR 50.59 / 10 CFR 72.48 Reviews

This document is associated with the implementation of the Site Emergency Plan. Revision of this document requires performance of a 10 CFR 50.54(q) in accordance with EP-AA-120-1001, 50.54(q)

~~Safety Related~~

CONTINUOUS USE

Approval Authority: Director Site Operations

SUMMARY OF ALTERATIONS

Revision	Change	Summary of Revision or Change
059	00	Change 1 Attach. 20 changed step 8.8 to say recall personnel as necessary. Change 2 Attach. 21 deleted Change 3 Attach. 15 deleted step 6.3.2 to notify RP supervision by activating ERONS Change 4 Attach. 24 deleted steps 11.1 through 12.7 for activation of ERONS. Made new step 11.1 REFER to EP-AA-112-100-F-57 for activation instructions Changes made due to ERONS vender change to Everbridge

TABLE OF CONTENTS

TABLE OF CONTENTS

SECTION TITLE PAGE

1.0 PURPOSE

1.1. This procedure provides emergency response instructions for Shift Manager whenever events are in progress which could affect plant safety, personnel safety or health and safety of offsite population.

1.2. The NRC staff has issued Amendment No. 269 to Renewed Facility Operating License No. DPR-53 and Amendment No. 245 to Renewed Facility Operating License No. DPR-69 for Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2. The capability for classifying fuel damage events at Alert level threshold has been established for Calvert Cliffs Nuclear Power Plant. The capability is described in this procedure.

2.0 APPLICABILITY/SCOPE

2.1. Applicability

2.1.1. This procedure applies to the Shift Manager.

2.2. Responsibilities

2.2.1. The Shift Manager

1. Evaluates events in progress and respond using appropriate immediate actions.

2. Maintains documentation for records retention.

3. The highest ranking Licensed Operator or Auxiliary Operator to survive a hostile action against the Control Room (that leads to loss of normal command and control) will implement the requirements of this procedure PER Attachment 27, Extensive Damage Mitigation Guidelines, and Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation. **[B2345]**

3.0 REFERENCES AND DEFINITIONS

3.1. Developmental References

3.1.1. 10 CFR 20, Standard for Protection Against Radiation

3.1.2. 10 CFR 50.47, Emergency Plans

3.1.3. 10 CFR 50 Appendix E to Part 50, Emergency Planning and Preparedness for Production and Utilization Facilities

3.1 (Continued)

3.1.4. NUREG 0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

3.1.5. NRC RIS 2002-12A, Power Reactors NRC Threat Advisory and Protective Measures System, Revision 1

3.1.6. NEI-99-01, Methodology for Development of Emergency Action Levels, Revision 4

3.1.7. NEI 06-12,B.5.b Phase 2 & 3 Submittal Guideline, Revision 2

3.1.8. ESP: ES200100648, Supplement 000, Rev. 0000, Severe Weather Impact on Containment in a Defueled Condition with the Equipment Hatch Door Removed.

3.1.9. CNG-PR-1.01-1009, Procedure Use and Adherence Requirements

3.1.10. CNG-PR-1.01-1011, Control of Station-Specific Procedure Change Process

3.1.11. Calvert Cliffs Nuclear Power Plant Emergency Response Plan

3.2. **Performance References**

3.2.1. CNG-MN-4.01-1006, OnLine Schedule Management

3.2.2. CNG-NL-1.01-2004, Obtaining NRC Enforcement Discretion

3.2.3. CNG-OP-4.01-1000, Integrated Risk Management

3.2.4. AOP-3F, Loss of Offsite Power in Modes 3, 4, 5 and 6

3.2.5. AOP-7L, Circulating Water/Intake Malfunctions

3.2.6. AOP-7M, Major Grid Disturbances

3.2.7. EOP-2, Loss of Offsite Power

3.2.8. EOP-7, Site Blackout

3.2.9. EP-AA-112-100-F-51, Shift Communicator Checklist

3.2.10. EP-CHLST-MCR03, Shifts Dose Assessor Checklist

3.2.11. ERPIP-613, CHLA Large Area Loss

3.2.12. OI-4, Nitrogen Gas System

3.2 (Continued)

3.2.13. OI-21 A, B, C, Diesel Generator

3.2.14. OI-21D, Fuel Oil Storage and Supply

3.2.15. OI-22F, Control Room and Cable Spreading Rooms Ventilation

3.2.16. OI-22H, Switchgear Ventilation and Air Conditioning

3.2.17. OI-27E, SMECO Offsite Power System

3.2.18. OI-29, Saltwater System

3.2.19. OP-4, Plant Shutdown from Power Operation to Hot Standby

3.2.20. 1C24B-ALM, Fire Systems Alarm Manual

3.2.21. Emergency Telephone Directory

3.2.22. SY-AA-101-132, Security Assessment and Response to Unusual Activities

3.3. **Definitions**

3.3.1. Elevated Alert:

Warns of a credible terrorist threat against the United States and its' territories that is general in both timing and target, or details significant trends and developments in terrorism such that it is reasonable to recommend implementation of protective measures to thwart or mitigate against an attack.

3.3.2. Imminent Alert:

Warns of a credible, specific, and impending terrorist threat against the United States and its' territories that is sufficiently specific and credible to recommend implementation of protective measures to thwart or mitigate against an attack.

4.0 PREREQUISITES

4.1. Personnel Skill Levels Required

4.1.1. Personnel performing this procedure shall be qualified on tasks or activities contained in this procedure.

5.0 PRECAUTIONS

5.1.1. Declared pregnant women and minors are not authorized to perform emergency functions.

6.0 PERFORMANCE

6.1. Activation

None

6.2. Process

6.2.1. **IDENTIFY** appropriate event from listing below,
THEN GO TO indicated attachment for instructions:

- Attachment 14, SEISMIC EVENT **[B9289]**
- Attachment 15, Personnel Emergency
- Attachment 16, Fire In a Protected Area, ISFSI, or MPF
- Attachment 17, Fires that are Out
- Attachment 18, Fires Outside the Protected Area
- Attachment 19, Radiological Event
- Attachment 20, Severe Weather
- Attachment 22, Hazardous Material and Offsite Oil Spill Response
- Attachment 23, Containment Evacuation
- Attachment 24, Security **[B1159] [B1162] [B1167] [B1168] [B1200][B1833]**
- Attachment 25, Large Area Losses **[B1162] [B1168]**
- Attachment 26, Large Steam Leak
- Attachment 27, Extensive Damage Mitigation Guidelines **[B2345]**
- Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation **[B2345]**

6.3. Deactivation

6.3.1. **WHEN** notified of event termination,
THEN FORWARD records **AND** documentation generated from use of Emergency Response Plan Implementation Procedures to Emergency Preparedness.

7.0 POST PERFORMANCE ACTIVITIES

None

8.0 BASES

[B1153] SOER 99-1, Recommendation 2, for conservatively placing the plant in a safe operating or shutdown condition when significant threats (hurricane) to grid stability exists.

[B1154] Hurricane Floyd Lessons Learned.

[B1155] ES199900653, in the event of a hurricane affecting CCNPP, make corrections to short term pressure limits to Saltwater Header Pressures PER OI-29, Saltwater System.

[B1159] Incorporated changed instructions in Attachment 24, Security, in response to NRC Incident Response Center message to all nuclear power plant sites, "Safeguards Advisory for Power Reactors," dated October 6, 2001. Contents of NRC Incident Response Center message is Safeguards Information.

[B1165] IR4-002-736, (IR200200733) On November 11, 2002 ERPIP-3.0, Attachment 20 step 9 was performed for severe weather. The action performed (exiting reduced inventory) was insufficient to meet core cooling in the event of Site Blackout.

[B1166] ES200200015 Supp. No. 000, Evaluation of the potentially high SRW pump room temperature (in excess of design value) due to high temperature in the TB.

[B1167] Incorporated Airborne Threat instructions in Attachment 24, Security, in response to NRC Safeguards Advisory for Operating Power Reactors (SA-05-02), dated January 26, 2005. Contents of NRC advisory is Safeguards Information.

[B1168] NRC Letter, R. W. Borchardt for J. E. Dyer to Holders of Licenses for Operating Power Reactors as listed in enclosure 1, NRC Staff Guidance for Use in Achieving Satisfactory Compliance with February 25, 2002, Order Section B.5.b, February 25, 2005.

[B1200] NRC Letter from Mr. S. J. Collins (NRC) to Mr. C. H. Cruse (CCNPP), "Issuance of Order for Interim Safeguards and Security Compensatory Measures for - Calvert Cliffs Nuclear Power Plant Units 1 & 2," dated February 25, 2002.

[B1833] CT200600005 MS #5 and #10, Revise Fire Brigade and Plant Operator Dispersal Plan.

[B2345] NRC Letter, Catherine Haney (NRR) to J. A. Spina (CCNPP), "Calvert Cliffs Nuclear Power Plant, Units 1 & 2 – Mitigation Strategy Assessments and Closure Process for Phases 1, 2, and 3", dated October 12, 2006.

[B09631] SOER 07-02, Rec 1 Effectiveness Review under AI-2012-000022-001. Contingency plans for emergency response actions and plant operations were developed and incorporated in ERPIP-3.0, Attachment 22.

[B9289] CCNPP response to IER L2-12-12. Greater than Design Basis Earthquake results on Loss of OFF-SITE Power and Reactor Scram

[B09460] CCNPP response to IER L1-11-2, Rev 2, Recommendation 6. If dry casks are used for spent fuel storage, establish procedures to verify cask condition following severe weather, seismic events or flooding. These procedures should include visual inspections to identify cask damage that could result in a loss of containment, shielding or cooling functions. Procedures should also include area radiation surveys to identify any deviation from normal background levels and should identify response actions if abnormal conditions are found. Include use of these procedures in training for applicable personnel

9.0 RECORDS

9.1. Records generated by this procedure may be permanent, non-permanent, or lifetime radiological records depending on circumstances under which they are generated. Records shall be captured and controlled as follows:

9.1.1. During an actual event as described in the purpose statement of this procedure, records shall be considered quality records and submitted to Emergency Preparedness Unit for final disposition **PER** CNG-PR-3.01-1000, Records Management.

- Attachment 14, SEISMIC EVENT
- Attachment 15, Personnel Emergency
- Attachment 16, Fire In The Protected Area, ISFSI, or MPF
- Attachment 17, Fires that are Out
- Attachment 18, Fires Outside the Protected Area
- Attachment 19, Radiological Event
- Attachment 20, Severe Weather
- Attachment 22, Hazardous Material and Offsite Oil Spill Response
- Attachment 23, Containment Evacuation

9.1.2. During an actual event as described in purpose statement of this procedure, dosimetry records, that is, any dose-related record including access history records, are considered radiological quality records and are to be handled and maintained **PER** standard practices and unit procedures.

9.1.3. During a drill or exercise, records generated shall be considered quality records and submitted to Emergency Preparedness Unit for evaluation.

- Attachment 14, SEISMIC EVENT
- Attachment 15, Personnel Emergency
- Attachment 16, Fire In The Protected Area, ISFSI, or MPF
- Attachment 19, Radiological Event
- Attachment 22, Hazardous Material and Offsite Oil Spill Response
- Attachment 23, Containment Evacuation

Attachment 1, Deleted

EALS are located in FCMS under EAL–TB, EAL–HOT, and EAL–COLD.

Attachment 2, Deleted

Attachment 3, Deleted

Attachment 4, Deleted

Attachment 5, Deleted

Attachment 6, Deleted

Attachment 7, Deleted

Attachment 8, Deleted

Attachment 9, Deleted

Attachment 10, Deleted

Attachment 11, Deleted

Attachment 12, Deleted

Attachment 13, Deleted

Attachment 14, SEISMIC EVENT [B9289]

Implementation: Time: _____ **Date:** _____

1.0. **EVALUATE** Seismic activity by any of the following:

1.1. **EVALUATE** implementation of the Emergency Response Plan using data from ALL Seismic Recorders obtained per OI-46, Seismic Measurement Equipment. Evaluate Emergency Action declaration per Emergency Action Level (EAL) thresholds.

1.2. **IF** the effects of the earthquake were felt by on-site personnel (See OI-46, Table 1).
THEN EVALUATE implementation of the Emergency Response Plan. Evaluate Emergency Action declaration per EAL thresholds.

1.3. **CONTACT** one of the following earthquake centers to get information on the extent of the earthquake:

- The National Earthquake Information Center (NEIC located at Golden, CO) at 303-273-8500. Select option 1 and inform the analyst you wish to confirm recent seismic activity in the vicinity of Calvert Cliffs Nuclear Power Plant. Provide analyst with the following CCNPP coordinates: 38° 25' 39.7" north latitude, 76° 26' 45" west longitude.

- The University of Delaware at 302-831-1576

NOTE

The latest USGS phone numbers from the web site are:

- 703-648-5953 USGS Headquarters (Virginia)
- 303-236-5900 Denver Federal Center (Colorado)
- 650-853-8300 Menlo Park (California)
- 573-308-3500 Rolla (Missouri)
- 907-786-7011 Alaska Science Center (Alaska)

1.4. **IF** available,
THEN REFER to the U.S. Geological Survey (USGS) web site for the latest earthquake **AND** contact information at the following address.
http://earthquake.usgs.gov

Attachment 14, SEISMIC EVENT [B9289]

2.0. **IF** peak acceleration values are greater than:

0.15g Horizontal **OR** 0.10g Vertical (Design Basis Earthquake),
THEN:

2.1. **COMMENCE** a controlled shutdown **PER** OP-3, **AND PLACE** both Units in Mode 5 as expeditiously as possible.

2.2. **DETERMINE** reportability requirements **PER** LS-AA-1400.

2.3. **COMMENCE** immediate short term walkdowns and inspections of Plant Equipment per Step 7.0.

2.4. **REQUEST** System Engineering to **PERFORM** Post Event walkdown per MN-1-319, STRUCTURE **AND** SYSTEM WALDOWNS.

3.0. **IF** peak acceleration values are within the following ranges:

GREATER than 0.08g and LESS than 0.15g Horizontal (Operating Basis Earthquake)

GREATER than 0.053g and LESS THAN 0.10g Vertical (Operating Basis Earthquake)
THEN

3.1. **DETERMINE** reportability requirements **PER** LS-AA-1400.

3.2. **COMMENCE** a controlled shutdown **PER** OP-3.

3.3. **COMMENCE** immediate short term walkdowns and inspections of Plant Equipment per Step 7.0.

3.4. **REQUEST** System Engineering to **PERFORM** Post Event walkdown per MN-1-319, STRUCTURE **AND** SYSTEM WALDOWNS.

Attachment 14, SEISMIC EVENT [B9289]

NOTE
The licensee is required to demonstrate to the NRC that NO functional damage has occurred to those features necessary for continued operation without undue risk to the health and safety of the public, **PER** 10 CFR 100.

4.0. **IF** Units require Shutdown,
THEN ENSURE prior to resuming operation, no functional damage has occurred to those features necessary for continued operation without undue risk to the health and safety of the public, PER 10 CFR 100.

5.0. **IF** peak acceleration values are less than 0.08g horizontal or 0.053g vertical (Operating Bases Earthquake), **AND** the effects of the earthquake,have been felt by on site personnel,
THEN PERFORM the following:

5.1. **DETERMINE** reportability requirements per LS-AA-1400.

5.2. **COMMENCE** immediate short term walkdowns and inspections of Plant Equipment per Step 7.0.

6.0. **IF** additional seismic events occur,
THEN REPEAT steps 1 through 7 as necessary.

Attachment 14, SEISMIC EVENT [B9289]

NOTE

- Control Room and Operations personnel should carefully monitor parameters of running equipment watching for changes due to the Earthquake.

- Walkdowns shall be performed by Plant Operators because of their familarity with pre-earthquake conditions of Plant Equipment. Other Plant Personnel, (e.g. Engineering or Maintenance) may assist with the walkdowns. Walkdowns should not be delayed by a significant period of time waiting for support personnel to become available.

- Inspect General Plant Areas for the following, and Inform the Control Room.

  a. Mechanical Components:

  (1) Damage to flooring, mountings, Snubbers, and Pipe Hangers.

  (2) Damage and Physical misalignment of Equipment.

  (3) The presence of leaks and other indication of loss of pressure boundries.

  (4) The presence of Abnormal Sounds from Operating Equipment.

  b. Electrical Equipment:

  (1) Breakers and Disconnect Switches not in their normal position.

  (2) Dropped flags on protective relays for Buses and equipment.

  (3) Physical damage to Switchgear, Transformers or other Electrical equipment

7.0. **FOLLOWING** a Seismic Event **PERFORM** detailed walkdowns of Plant areas AND equipment:

7.1. Intake Structure with particular attention to Salt Water Pumps and SW system piping

Attachment 14, SEISMIC EVENT [B9289]

7.2. Outside Structures

- 11 and 21 RWT
- 11,12,and 21 CST, especially signs of ground subsidence indicating damage to underground piping
- AFW Valve Stand
- 11 and 21 FOST especially signs of damage to fuel lines to the DGs
- 11 and 12 PTWST

7.3. 1A and 0C DG Buildings, including Switchgears and support systems required for operation

7.4. 1B, 2A, and 2B EDGs, including support systems required for operation

7.5. 13 KV Metal Clad Switchgears

7.6. Service Transformers P13000-1, P13000-2

7.7. 500 KV Switchyard

7.8. Independent Spent Fuel Storage Installation (ISFSI) **[B09460]**

- Have Security perform a preliminary visual inspection of the ISFSI area for signs of shifting, damage or degradation to the horizontal storage modules (HSM). Ensure Security reports any signs of shifting, damage or degradation
- Notify RP to perform radiation surveys as appropriate, if damage or degradation is suspected or reported. Ensure RP reports any deviation from normal background radiation levels

7.9. FLEX Equipment Storage Buildings

- FLEX Storage Robust Building (FSRB)
- FLEX Storage Commercial Building (FSCB)

7.10. 45' Switchgear Rooms

Attachment 14, SEISMIC EVENT [B9289]

7.11. 27' Switchgear Rooms

7.12. SRW Pump Rooms SRW Pumps and Heat Exchangers as well as 13(23) AFP

7.13. 69' Aux Building

- SRW Head Tanks
- CC Head Tanks
- Spent Fuel Pool
- Electrical Pen Rooms (MCC-114R/214R)

7.14. 45' Aux Building

- ADVs
- Electrical Pen Rooms (MCC-104R/204R)

7.15. 27' Aux Building

- Spent Fuel Pool Cooling Pumps and Heat Exchangers
- 27' West Pen Rm checking for leaks (use Camera if available)

7.16. 5' Aux Building

- Service Water Supply and Returns Headers
- Component Cooling Rooms CC Pumps and Heat Exchangers
- BAST Rooms

7.17. -10' Aux Building

- Charging Pumps and Piping

Attachment 14, SEISMIC EVENT [B9289]

7.18. -15' Aux Building

- ECCS Pump Rooms, Pumps, Heat Exchangers, and ECCS Piping

7.19. All levels of Turbine Building

7.20. Water Treatment Areas

8.0. **IF** a Seismic Event OBE level or greater has occurred, **THEN PERFORM** the following:

8.1. **FOR** all SAFETY-RELATED BREAKERS that are **NOT** in the connected position, with Shift Manager concurrence, **INFORM** E&C TO:

1. **INSPECT** for loose hardware and deformation of the drawout element and cell

2. **RACK** the breaker into the **TEST** position **AND VERIFY** several successful close-open operations.

3. **RETURN** the breaker to the **AS FOUND** position

9.0. **SUBMIT** an Issue Report for any discrepancies.

Termination: Time: _____ **Date:** _____

Attachment 15, Personnel Emergency

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Caller's Name: _____

Location of injured person: _____

Nature of injury: _____

Phone number to call to reach the scene: _____

NOTE

If based on the report the injury is minor in nature (small cut with little bleeding, small contusion or minor sprain with person able to easily walk), then sounding the Emergency Alarm is unwarranted.

2.0 **IF** initial assessment by the Control Room is that sounding the Emergency Alarm is unwarranted,
THEN CONTACT Fire and Safety Watch (FASW) (and RPT, if injured person is in Radiologically Controlled Area (RCA)).

2.1. **DIRECT** response to personnel emergency.

2.2. **NOTIFY** Site Medical to perform medical assessment (495-4022).

2.2.1. **IF** Site Medical is **NOT** available
THEN CALL Oyster Creek Medical for assistance (609-971-4182).

2.3. **COMPLETE** Termination Time and Date.

2.4. **NOTIFY** Site Safety of the incident (495-5215).

2.5. **EXIT** this procedure.

Attachment 15, Personnel Emergency (Continued)

3.0 **ALERT** Response Personnel.

3.1. **SOUND** Emergency Alarm for 5 seconds.

3.2. **ANNOUNCE:** "A personnel emergency exists." (Give location and nature of injury.) "First Aid Team respond."

3.3. **IF** injured person is in RCA,
THEN ALSO ANNOUNCE: "Radiation Protection Technician Respond."

3.4. **REPEAT** once.

4.0 **CONFIRM AND MONITOR** response.

4.1. **CONFIRM** First Aid Team response by contacting FASW via radio.

4.2. **SELECT** Channel 1D as primary channel on CRS console. (FASW is on this channel.)

4.3. **HAVE** CRO radio remain on Channel 1H with volume turned up.

5.0 **MAKE** Site notifications.

5.1. **NOTIFY** Site Medical to perform medical assessment (495-4022).

5.1.1. **IF** Site Medical is **NOT** available
THEN CALL Oyster Creek Medical for assistance (609-971-4182).

5.2. **NOTIFY** Site Safety of the incident (495-5215).

6.0 **DETERMINE** contamination and hospitalization status.

6.1. **IF** injured person is suspected to be contaminated,
THEN HAVE an RPT determine **AND** report person's contamination status.

6.1.1. **IF** unknown whether injured person is contaminated or not,
THEN TREAT as contaminated.

Attachment 15, Personnel Emergency (Continued)

NOTE

First Aid Team Leader can directly communicate with offsite responding units on Radio Channel 1E.

6.2. **IF** hospitalization is required,
THEN NOTIFY CAS/SAS (495-4695) for offsite assistance.

6.3. **IF** a contaminated injured person requires hospitalization,
THEN ALERT Calvert Memorial Hospital Emergency Room by calling 410-535-8344, 410-535-8345, or Hospital Switchboard 410-535-4000.

6.3.1. **TALK** to a nurse or doctor
AND REPORT the following information:

Number of injured people ____ Number of contaminated ____

Nature of injuries:_____

Estimated time of arrival: _____

6.3.2. **REVIEW** Regulatory Reporting requirements. (50.72(b)(3)(xii))

7.0 **CONTINUE** to monitor event
AND DIRECT assistance to scene as requested by First Aid Team Leader.

7.1. **PROVIDE** updates to management as warranted.

8.0 **WHEN** notified by First Aid Team Leader that event may be terminated,
THEN ANNOUNCE a brief update on status of personnel emergency.

8.1. For example,

"Person is being escorted to medical, person being transported to hospital".

AND

"Now secure from Personnel Emergency. Now secure from Personnel Emergency."

Termination: Time: _____ **Date:** _____

Attachment 16, Fire In The Protected Area, ISFSI, Or MPF

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Caller's Name: _____ Number to reach: _____

Location of Fire: _____

Type of Fire: _____

*Time Report of Fire is Received: _____

*Time of Fire Control Panel Alarm: _____

*DID AN EXPLOSION OCCUR? YES NO

1.1. **ENSURE** Shift Manager has above asterisked information as soon as possible for EAL determination.

1.1.1. The earliest time recorded above is used for 15 minute EAL threshold for fires within Protected Area.

2.0 **ACTIVATE** response personnel.

2.1. **SOUND** Emergency Alarm for 5 seconds.

2.2. **ANNOUNCE**: "There is a fire (Give location and nature of fire). Fire Brigade (and Radiation Protection Technician)[if fire is in a RCA] respond."

2.3. **REPEAT** once.

2.4. **IF** a fire **OR** explosion has disturbed any insulation,
THEN CONSIDER contacting Industrial Hygienist **AND** Asbestos Project Designer in Mechanical Planning Department.

3.0 **CONFIRM AND MONITOR** response.

3.1. **CONFIRM** Fire Brigade response by contacting Fire Brigade Leader (FBL) via radio or plant page.

3.2. **SELECT** Channel 1D as primary channel on CRS console. (FBL and Interior Command are on this channel.)

3.3. **HAVE** CRO radio remain on Channel 1H with volume turned up.

3.3.1. **HAVE** Operations Technical Assistant (OTA) select 1H to monitor for operational concerns.

3.4. **CONSIDER** the following:

- Securing ventilation and electrical power impacting scene.
- Evacuation, restricting access, or isolation of certain areas to maintain personnel safety.
- Securing or venting flammable sources impacting scene (for example, Hydrogen, Oil).

4.0 **DETERMINE** status of Fire Brigade response.

4.1. **RECORD** time Fire Brigade is fully staffed: _____

4.2. **CONTACT** CAS/SAS (495-4695) for assistance to transport fire brigade and equipment if fire is at ISFSI.

4.3. **RECORD** time Extinguishing Agent is applied to fire,

By Fire Brigade: _____ By automatic suppression system: _____

NOTE

FASW can directly communicate with offsite responding units on Radio Channel 1E.

4.3.1. **CALL** for Offsite Assistance by contacting CAS/SAS (495-4695) if fire involves any of the following:

Hydrogen, Turbine Lube Oil, Hydrogen Seal Oil, 4Kv or higher Transformer,

or the FBL requests Offsite Assistance (Ask the FBL if necessary).

Time of call for Offsite Assistance: _____

5.0 **REVIEW** Emergency Action Levels

5.1. **REVIEW** EALs based on fire/explosion event considering duration, impact on plant equipment, and location.

5.2. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel the appropriate attachment based on event classification.

6.0 **CONTINUE** to monitor event **AND** direct assistance to scene.

6.1. **REVIEW** the following for fire strategy information on fire location, potential fire affects, **AND** for mitigating and compensatory measures that do not need to be involved:

- Fire Strategies Manual
- Plant Area Fire Strategy Templates
- AOP-9 Series
- Attachment titled Interactive Cable Analysis

6.2. **IMPLEMENT** actions **PER** the above procedures, Fire Brigade Leader, and OTA.

6.3. **CONSIDER** securing ventilation and electrical power impacting scene.

6.4. **CONSIDER** evacuation, restricting access, or isolation of certain areas to maintain personnel safety.

6.5. **CONSIDER** strategies for protecting adjacent equipment, especially Safety Related and Safe Shutdown equipment.

6.6. **CONSIDER** implementing a unit shutdown, rapid shutdown, or manual trip should fire threaten ability to safely stay on line or severely challenges nuclear safety margin.

6.7. **IF** turbine ventilation is completely secured,
THEN RESTORE it as soon as possible **AND** within 10 hours at latest to avoid exceeding design temperatures for SRW pp rms. **[B1166]**

7.0 **UPDATE** station on event progress via announcements, as appropriate.

8.0 **EVALUATE** if large area loss has occurred.

8.1. **IF** fire has caused large losses of equipment
OR an inability to access significant areas of plant,
THEN EVALUATE attachment for Large Area Losses **AND** ERPIP-613, CHLA Large Area Loss, to develop recovery and mitigation strategies. **[B1162][B1168]**

WARNING

Restoring power to damaged electrical equipment without proper administrative controls can cause additional fires, unexpected equipment actuations, equipment damage, or electrocution risks.

8.2. **IF** the fire has damaged electrical equipment or cables, **THEN IDENTIFY** affected circuitry, AND **ESTABLISH** formal administrative controls (ex., clearance/danger tagouts) to prevent inadvertent injection of energy into damaged circuitry, until repairs can be made.

9.0 **TERMINATE** event, as follows:

9.1. **WHEN** reported from scene that fire is out,
THEN:

9.1.1. **RECORD**: Time_____ **AND**
ANNOUNCE to the station that fire is now out.

9.2. **WHEN** notified by Fire Brigade Leader that event may be terminated,
THEN ANNOUNCE, "Now secure from the Fire. Now secure from the Fire."

9.3. **ENSURE** equipment **AND** areas secured as part of fire response are restored as appropriate.

9.4. **REVIEW** Regulatory Reporting **AND** PCB Management procedures for any necessary reports.

9.5. **ENSURE** NFM is aware of any fire affecting ISFSI.

9.6. **IF** fire occurred in Aux Building or Containment,
THEN ENSURE a CR is written to have fire assessed for actions to be taken **PER** Tech Spec 5.5.11, Ventilation Filter Testing Program.

Termination: Time: _____ **Date:** _____

Attachment 17, Fires That Are Out

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Caller's Name: _____ Number to reach: _____

Location of Fire: _____

Type of Fire: _____

2.0 **ACTIVATE** response personnel.

2.1. **PROVIDE** pertinent information **AND**
DIRECT Fire and Safety Watch to assess fire and advise.

2.2. **PROVIDE** pertinent information **AND**
DIRECT RPT to assess the potential for airborne radioactivity based on fire location **AND** what was burning.

2.3. **PROVIDE** pertinent information to Security so that they can assess any security issue (tampering, sabotage) based on the evidence.

3.0 **ACT** on advice from FASW, RPT, and Security.

3.1. **DOCUMENT** actions taken:

_____
_____
_____
_____
_____

3.2. **IF** fire involved PCB's,
THEN REVIEW PCB Management procedure for reporting requirements.

4.0 **SECURE** from event.

Termination: Time: _____ **Date:** _____

Attachment 18, Fires Outside The Protected Area

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Caller's Name: _____ Number to reach: _____

Location of Fire: _____

Type of Fire: _____

2.0 **IF** fire is in ISFSI OR MPF,
THEN STOP using this attachment **AND PROCEED** to attachment for fires in protected area, ISFSI, or MPF.

3.0 **ACTIVATE** response personnel.

3.1. **IF** fire is located in Owner Controlled Area,
THEN:

3.1.1. **NOTIFY** Fire Marshall (or alternate).

3.1.2. **CALL** for offsite assistance by contacting SAS/CAS (495-4695) **OR** calling directly (Radio channel 1E).

3.1.3. **DISPATCH** Fire Brigade Leader to act as station liaison with offsite assistance.

3.1.4. **MAKE** station announcement, as appropriate, to notify station personnel.

3.2. **IF** fire is in office building or warehouse complex
AND operational conditions allow Fire Brigade to respond outside Protected Area,
THEN:

NOTE

The OTA does not need to respond.

3.2.1. **SOUND** Emergency Alarm for 5 seconds.

3.2.2. **ANNOUNCE** "There is a fire." (Give location and nature of fire.) "Fire Brigade respond."

3.2.3. **REPEAT** once.

3.3. **IF** operational conditions prohibit Fire Brigade response,
THEN:

3.3.1. **CALL** for Offsite Assistance by contacting CAS/SAS (495-4695) OR calling directly (Radio channel 1E).

3.3.2. **MAKE** station announcement as appropriate to notify station personnel.

4.0 **CONFIRM AND MONITOR** response.

4.1. **IF** Fire Brigade was dispatched,
THEN:

4.1.1. **CONFIRM** Fire Brigade response by contacting Fire Brigade Leader (FBL) via radio or plant page.

4.1.2. **SELECT** Channel 1D as primary channel on the CRS console. (FBL and Interior Command are on this channel.)

4.1.3. **HAVE** CRO radio remain on Channel 1H with volume turned up.

4.2. **IF** Offsite Assistance was requested,
THEN:

4.2.1. **CONFIRM** their response with security.

4.2.2. **MONITOR** radio traffic for current activity. (Emergency Telephone Directory provides details on audio operation.)

5.0 **CONTINUE** to monitor event **AND** direct assistance to scene as requested by on-scene personnel.

5.1. **CONSIDER** the following:

- Securing ventilation and electrical power impacting scene.
- Evacuation, restricting access, or isolation of certain areas to maintain personnel safety.
- strategies for protecting adjacent equipment.

6.0 **UPDATE** station on event progress via announcements, as appropriate.

Attachment 18, Fires Outside The Protected Area (Continued)

7.0 **TERMINATE** event, as follows:

7.1. **WHEN** reported from scene that fire is out,
THEN RECORD: Time_____

7.2. **WHEN** notified by on-scene personnel that event may be terminated
AND previous announcements have been made,
THEN ANNOUNCE: "Now secure from the Fire. Now secure from the Fire."

7.3. **ENSURE** equipment **AND** areas secured as part of fire response are restored as appropriate.

7.4. **REVIEW** Regulatory Reporting **AND** PCB Management procedures for any necessary reports.

Termination: Time: _____ **Date:** _____

Attachment 19, Radiological Event

Implementation: Time: _____ Date: _____

Guidance for Determination of Radiological Event occurrence

- Unplanned radiation field greater than 100 mr/hr.
- Radiation field greater than 100 mr/hr on contact with HSM access door.
- Unplanned airborne radioactivity greater than 1E-9 microCi/cm3.
- Unplanned liquid or gaseous release of material.
- Unplanned event requiring evacuation of personnel due to radiological conditions.
- Unplanned loose surface contamination outside RCA greater than 10000 dpm/100 cm2 Beta-Gamma or 1000 dpm/100 cm2 Alpha.
- Unplanned radiation monitor alarms that indicates a significant deviation from normal conditions.

1.0 RECORD THE FOLLOWING INFORMATION:

Type of Radiological Issue: (circle above or describe) _____

_____

Unit, Area and Systems affected:_____

Current Radiation Monitors in Alarm: _____

Is Immediate evacuation of an area warranted? YES NO

2.0 **NOTIFY** station personnel.

2.1. **SOUND** Emergency Alarm for 5 seconds.

2.2. **ANNOUNCE**: "A Radiological Event exists." (Give location and nature of event.)

2.3. **IF** immediate evacuation of an area is necessary,
THEN ANNOUNCE "All personnel evacuate (give affected area) immediately."

2.4. **IF** appropriate to situation,
THEN PROVIDE evacuation route to minimize exposure.

2.5. **REPEAT** once.

3.0 **EVALUATE, MONITOR, AND RESPOND** to abnormal conditions.

3.1. **DIRECT** RPT to assess conditions **AND** provide recommendations on:

3.1.1. Need to evacuate or control access to certain areas. (Announce **PER** Step 2 if evacuation is warranted.)

3.1.2. Methods to control activity release and minimize personnel exposures.

3.1.3. Need for additional support personnel.

3.1.4. Operator actions needed to mitigate or control situation.

3.2. **DIRECT** Chemistry Shift Technician (CST) to perform EP-CHLST-MCR03, Shifts Dose Assessor Checklist, **AND** provide reports on:

3.2.1. Status of affected radiation monitors, readings and trends.

3.2.2. Dose Projection and offsite dose consequences.

3.2.3. Protective action recommendations.

3.3. **DIRECT** Operator response based on:

3.3.1. Implementation of Alarm Response Manual actions.

3.3.2. Abnormal Operating Procedures (leak identification and isolation, inadvertent releases, spills).

3.3.3. As advised by RPT.

4.0 **MAINTAIN** Control Room habitability.

4.1. **IF** airborne radioactivity could impact habitability of Control Room, **THEN:**

4.1.1. **SECURE** Toilet Exhaust Fan.

4.1.2. **CONSIDER** placing Control Room Post LOCI filters in service.

4.1.3. **BRING OUT** SCBA's **AND** **STAGE** them for use as recommended by RPT or CST.

Attachment 19, Radiological Event (Continued)

5.0 **CONTACT** station personnel for evaluations.

5.1. **IF** an accidental release of radioactivity is occurring as indicated by an alarm on WRNGM, Main Vent Gaseous Monitor, Containment Radiation Monitors, or Main Steam Radiation Monitors,
OR a spill to the environment,
THEN NOTIFY Radiation Protection and Operations Management immediately.

5.2. **IF** event is associated with ISFSI or a Dry Storage Canister,
THEN NOTIFY Nuclear Fuel Management immediately.

5.3. **IF** a spill to environment has occurred,
THEN REQUEST Radiation Protection Manager determine if limits of 10 CFR 20 Appendix C have been exceeded.

6.0 **REVIEW** Emergency Action Levels.

6.1. **REVIEW** EALs based on radiological conditions **AND** dose projections.

6.2. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel, the appropriate attachment based on event classification.

7.0 **CONTINUE** to monitor event **AND** direct assistance as requested by RPT or Scene Leader.

7.1. **DIRECT** spill cleanup, as appropriate.

7.2. **CONSIDER** the following:

- Placing filters in service, and realigning, or securing ventilation impacting scene.
- Evacuation, restricting access, or isolation of certain areas to limit personnel exposure.

7.3. **MONITOR** offsite dose consequences until release rates are verified to be within technical specification limits.

7.4. **UPDATE** station on event progress via announcements, as appropriate.

Attachment 19, Radiological Event (Continued)

8.0 **TERMINATE** event, as follows:

8.1. **WHEN** event no longer warrants emergency response,
THEN ANNOUNCE:

"Now secure from the Radiological Event. Now secure from the Radiological Event."

8.2. **IF** areas were evacuated or restricted,
THEN ANNOUNCE "Normal access to (affected areas) is restored," as appropriate.

8.3. **ENSURE** equipment realigned **AND** areas secured as part of event response are restored, as appropriate.

8.4. **REVIEW** Regulatory Reporting procedure for any necessary reports.

Termination: Time: _____ **Date:** _____

Attachment 20, Severe Weather

Implementation: Time: _____ **Date:** _____

NOTE

Weather information is available from WEATHERTAP.com and National Weather Service (see the Emergency Response Facility Directory).

1.0 **VERIFY** Severe Weather conditions.

NOTE

500kv highline rights of way exist in Calvert, Anne Arundel, and Prince George's counties.

1.1. One of the following conditions exists for CCNPP's location **OR** for the right of way of any of the 500kv high lines:

☐	Tornado Watch	☐	Hurricane Warning
☐	Hurricane Watch	☐	Severe Winter Storm (ice or snow) that may affect Nuclear Safety/Production and ERO response
☐	Winds Predicted greater than 50 mph	☐	Severe Weather conditions warranting emergency response (**PER** Shift Manager)
☐	Tornado Warning	☐	*Severe weather with a potential for station flooding trigger point

*The station has experienced greater than 11.2 inches of rain in a 6 hour period **AND** a dry period of 2 to 3 days has occurred and rainfall is predicted at the station in excess of 18 inches in 6 hours **OR** rainfall is predicted to be greater than or equal to 3 inches per hours.

Expected time of onset and duration of severe weather:

_____

1.2. **IMPLEMENT** EP-1-108, Severe Weather, in parallel with this attachment.

2.0 **NOTIFY** station personnel, as follows:

2.1. **SOUND** Emergency Alarm for 5 seconds.

2.2. **ANNOUNCE**: "There is a severe weather condition in effect." (Give nature of severe weather.)

2.3. **REPEAT** once.

2.4. **CONTACT** Station Duty Manager **AND** **COORDINATE** with him the actions necessary to minimize potential missile hazards and/or prepare station for approaching severe weather.

2.5. **IF** implementing this attachment for a Tornado or Hurricane warning, **THEN NOTIFY** NRC Resident with a courtesy call.

> **NOTE**
>
> The initial steps required to be performed are dependent on severe weather conditions present. The Operations Shift Manager will determine required initial response steps that need to be completed.

3.0 **COMPLETE** initial response to Severe Weather, as follows:

3.1. **CLOSE** manways **AND** penetrations in Intake Structure.

3.2. **CONSIDER** isolating nitrogen to 12 Condensate Storage Tank PER OI-4, Nitrogen Gas System, to avoid loss of nitrogen due to evacuation of tank loop seal from high winds. **[B1154]**

3.3. **EVACUATE** trailers at wind speed greater than 50 mph. **[B1154]**

3.4. **ENSURE** 13kv Service Bus 23 is energized from SMECO **PER** OI-27E. **[B1153]**

3.5. **MAXIMIZE** Condensate Storage Tank inventories. **[B1153]**

3.6. **COMPLETE** tours of outside areas to identify and address issues challenging station's preparedness for onset of severe weather.

3.7. **ASSIGN** an individual to monitor weather conditions at least hourly throughout event.

3.8. **INVOKE** a "two man rule", as appropriate, for personnel safety for people dispatched outside during severe weather conditions.

3.9. **CONSIDER** shift personnel hold over or recall plans should severe weather affect the ability for oncoming shifts to relieve the watch.

3.9.1. **RECALL** personnel early enough to avoid travel through severe weather.

3.10. **PERIODICALLY MONITOR AND RESPOND** to plant condition challenges based on severe weather:

- Rain water intrusion and accumulation.
- Snow or ice accumulation, especially that affecting DG ventilation and cooling systems.
- Building damage that could lead to challenges to operating equipment.

4.0 **DETERMINE** need for further response.

4.1. **IF** a Tornado watch/warning or Hurricane watch/warning is in effect, **THEN CONTINUE** with remaining steps of this attachment.

4.2. **IF** severe weather other than tornado watch/warning or hurricane watch/warning is approaching,
THEN:

4.2.1. **COMPLETE** remaining steps of this attachment as determined appropriate by Shift Manager.

4.2.2. **UPDATE** station on event progress as appropriate.

4.2.3. **SECURE** from severe weather event per last step of this attachment.

NOTE

Steps 5.0 through 8.0 can be completed concurrently and in any order. Once weather conditions subside, this attachment can be exited without completion of all remaining steps by proceeding to last step in this attachment for event termination. Completion of preparatory steps should be expedited based on approaching speed of severe weather.

5.0 **PERFORM** escalated response to Severe Weather conditions.

5.1. **SECURE** all fuel handling operations **AND**
PLACE fuel in safe condition.

5.2. **ENSURE** 1B, 2A, and 2B DG's are aligned to 21 FOST **PER** OI-21D.

5.3. **ENSURE** Aux Boilers are aligned to 11 FOST **PER** OI-21D.

5.4. **IF** a tornado watch/warning exists,
THEN START 1B, 2A, and 2B DG Room ventilation fans by taking local handswitches to start.

5.5. **ENSURE** Operations crews on shift review the following procedures as determined appropriate by Shift Manager:

- AOP-7L, Circulating Water/Intake Malfunctions
- AOP-7M, Major Grid Disturbance
- EOP-7, Site Blackout **[B1153]**
- EOP-2, Loss of Offsite Power **[B1153]**
- AOP-3F, Loss of Offsite Power in Modes 3,4,5, and 6 **[B1153]**

5.6. **SECURE** maintenance or testing not essential for plant operations that:

- reduces electrical reliability of units.
- places either unit in a Medium Trip or CDF risk condition.
- places personnel or equipment at risk due to the weather itself or due to increased potential to lose electrical power.
- is classified High Risk **PER** CNG-OP-4.01-1000, Integrated Risk Management, unless that work has its own specific severe weather contingencies.

5.7. **INVOKE** contingency plans in place to address onset of severe weather.

5.8. **ENSURE** the following systems are available or initiate reasonable actions to restore them to full service before onset of severe weather:

- AFW systems
- Atmospheric Dump Valves
- Diesel Generators
- Station Batteries, Battery Chargers, and Vital Inverters
- Out of service safety related busses, transformers, or supply breakers

5.9. **PERIODICALLY CONTACT** Electric System Operator (ESO) for any impact to power distribution high lines.

6.0 **TAKE** preparatory actions for units in lower mode conditions, as follows:

6.1. For Unit in **Mode 5**:

6.1.1. **ENSURE** Containment Closure is established.

6.1.2. **ENSURE** Equipment Hatch is installed with all 20 hatch eyebolts.

6.1.3. **IF** Steam Generators are not available for heat removal,
THEN RAISE RCS level to about 160 inches in pressurizer to ensure adequate inventory is available in event of a Station Blackout. **[B1165]**

6.1.4. **IF** plant conditions do not allow for completion of above three items,
THEN EXPEDITE maintenance to ensure RCS can be filled **AND** containment closure established.

6.2. For Unit in **Mode 6:**

6.2.1. **VERIFY** all fuel handling is secured **AND** all fuel is in safe condition.

6.2.2. **ENSURE SHUT** SFP Transfer Gate Valve.

6.2.3. **MAINTAIN** Containment Closure.

6.3. For Unit that is **Defueled:**

6.3.1. **MAINTAIN** SFP temperature less than 90 degrees.

6.3.2. **CONSIDER** establishing containment closure.

6.3.3. **IF** a hurricane is approaching within 8 hours,
THEN ESTABLISH containment closure.

7.0 **TAKE** actions for approach of tornado. (N/A if not in tornado warning).

7.1. **ASSIGN** individuals responsibility for the following post tornado response actions:

7.1.1. **LINE UP** Control Room/Cable Spreading Room ventilation for fresh air mode PER OI-22F, should the roof condensers be lost.

7.1.2. **RESTORE** Switchgear Room ventilation **PER** OI-22H, should it be lost.

7.1.3. **OPEN** respective battery room doors **AND** ensure lighting is secured, should 27 ft. battery room supply or exhaust systems be lost.

7.1.4. **INSPECT** 69 ft. Auxiliary Building HVAC Equipment Room 512 air duct for integrity.

1. **IF** found degraded,
THEN INFORM Shift Manager to initiate immediate repairs.

7.2. **IF** an operating DG trips on high crankcase pressure due to a tornado approach,
THEN RESTART DG **PER** appropriate OI-21 if it is needed for electrical power and not otherwise damaged.

7.3. **REVIEW** EALs based on damage to plant.

7.3.1. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel, the appropriate attachment based on event classification.

7.4. **UPDATE** station on event progress, as appropriate.

8.0 **TAKE** actions for approach of hurricane. (N/A if not in a hurricane warning)

8.1. **ENSURE** all watertight doors are shut (Intake, AFW, SRW, and ECCS PP RM).

8.2. **START**, **LOAD**, **AND SHUTDOWN** each DG **PER** OI-21 A, B, and C.

8.3. **UPDATE** current maximum Saltwater Header Pressures carried on turnover sheet **PER** OI-29. **[B1155]**

8.4. **UPDATE** station on event progress as appropriate.

8.5. **WHEN** Hurricane is predicted to arrive within **16 hours**,
THEN SUSPEND routine plant maintenance as necessary to support hurricane preparation.

8.6. **WHEN** Hurricane is predicted to arrive within **12 hours**,
THEN COORDINATE with security to release personnel that do not have hurricane response responsibilities.

8.7. **WHEN** Hurricane is predicted to arrive within **8 hours**,
THEN SHUTDOWN operating units to Hot Standby condition (Mode 3). **[B1153]**

8.8. **WHEN** Hurricane is predicted to arrive within **4 hours**,
THEN RECALL personnel as necessary. **[B1153]**

8.9. **WHEN** Hurricane is predicted to arrive within **2 hours**,
THEN:

8.9.1. **SUSPEND** all non-essential work.

8.9.2. **ESTABLISH** accountability for all on station personnel.

8.9.3. **REVIEW** Tech Spec/Technical Requirements Manual actions/surveillance requirements that may need to be suspended for personnel safety.

8.9.4. **DETERMINE** applicability of Notice of Enforcement Discretion (Refer to CNG-NL-1.01-2004, Obtaining NRC Enforcement Discretion) or 10 CFR 50.54(x) (log readings, fire watch tours, watertight door checks).

8.10. **WHEN** Hurricane is predicted to arrive within **1 hour**,
THEN:

8.10.1. **ENSURE** all personnel on station are accounted for **AND** located within structures that are reasonably likely to withstand hurricane force winds.

8.10.2. **CONSULT** with Security Shift Supervisor to ensure any necessary security procedure deviations have Shift Manager (SRO) approval.

8.11. **REVIEW** EALs based on plant conditions.

8.11.1. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel, the appropriate attachment based on event classification.

Attachment 20, Severe Weather (Continued)

9.0 **TERMINATE** the event, as follow:

9.1. **WHEN** severe weather conditions have subsided,
THEN ANNOUNCE, "Now secure from severe weather. Now secure from severe weather."

9.2. **RELEASE** any personnel on duty due to severe weather.

9.3. **CONTACT** Engineering to conduct post-storm area walk downs for equipment or structural damage and water intrusion as determined appropriate by Shift Manager.

9.4. **IF** station has experienced wind speeds of greater than or equal to 50 mph,
THEN CONTACT Electrical Maintenance to perform thermography on switchyard components and connection points with plant.

9.5. **ENSURE** equipment operated, areas secured, equipment staged as part of storm response are restored as appropriate.

9.6. **REVIEW** Regulatory Reporting procedure for any necessary reports.

Termination: Time: _____ **Date:** _____

Attachment 21, Deleted

Attachment 22, Hazardous Material And Offsite Oil Spill Response

NOTE

Attachment 22 implements the requirements of basis **[B09631]**.

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Caller's Name: _____ Number to reach:_____

Spilled Material is: _____

- ___ Known Hazardous Material ___Unknown if Hazardous ___ Not Hazardous
- Spill is from a: ___Drum ___Tank ___ Pipe ___ Vehicle
  Other/Details;_____
- Spill's Estimated Size is: _____ (gallons pints ounces)
- ____ ft diameter pool on ground ____ ft^3 in air ____ unknown at this time
- Spill's Location: _____
- Spill is: ___Reaching Bay ___Reaching Bay Drain ___Reaching Soil
- ___ On Concrete/Asphalt surface ___Contained Other:_____
- Form of Material Spilled is: ___Oil ___Liquid ___ Gaseous ___ Powder
  Other/Details;_____

2.0 **ADVISE** person reporting spill to:

- have other people leave area,
- prevent anyone else from entering area, and
- remain in a safe location until Fire and Safety Watch (FASW) responds.

3.0 **IF** an unknown, potentially hazardous atmosphere exists,
THEN DIRECT FASW to obtain Multirae Photo Ionizing Detector (PID) before responding.

4.0 **IF** a significant offsite oil spill immediately threatens the ability of plant to maintain its ultimate heat sink,
THEN:

4.1. **COMMENCE** shutdown of both units at the rate necessary to maintain safety margin and avoid an automatic trip. (Expeditious shutdown, rapid down power or manual trip.)

4.2. **SECURE** Circulating Water Pumps as plant conditions allow **BY UTILIZING** a strategy to protect Salt Water Pumps.

4.2.1. **CONSIDER** backflowing some waterboxes as a method to avoid contaminant intrusion in Salt Water Systems.

4.3. **CONSIDER** switching/securing Salt Water Pumps as a strategy to preserve at least one unaffected Salt Water Subsystem as long as possible.

4.4. **IMPLEMENT** appropriate Emergency and Abnormal Operating Procedures to cope with conditions established to minimize impacts to ultimate heat sink.

4.5. **MAXIMIZE** availability of other systems important to core heat removal. (AFW, ADV's, ECCS, PORV's, CST's, etc.)

4.6. **DIRECT** immediate protective actions as recommended by Plant Management, County and State Authorities, and Federal Authorities.

4.6.1. **CONSIDER** installation of oil absorbing booms along intake baffle wall for significant oil spills.)

5.0 **ACTIVATE** response personnel.

5.1. **IF** Spill warrants Station Wide Attention,
THEN:

5.1.1. **SOUND** Emergency Alarm for 5 seconds.

5.1.2. **ANNOUNCE**: "There is a hazardous material spill." (**GIVE** location, material type if known, and estimated amount.) "Fire and Safety Watch and Shift Chemistry Technician respond."

5.1 (Continued)

5.1.3. **IF** day staff personnel are present,
THEN ALSO ANNOUNCE: "Safety Services Unit and Controlled Material Coordinator respond."

5.1.4. **ANNOUNCE**: "All other personnel stay clear of the affected area."

5.1.5. **REPEAT** once.

5.1.6. **HAVE** FASW shift radio channels to 1D.

5.2. **IF** Spill does not warrant Station Wide Attention,
THEN:

5.2.1. **DIRECT** FASW and CST to evaluate spill and determine appropriate actions.

5.2.2. **IF** Safety Services Unit and Controlled Material Coordinator are available,
THEN CONTACT them for response to scene.

6.0 **CONFIRM AND MONITOR** response.

6.1. **CONFIRM** spill response by contacting FASW via radio or plant page.

6.2. **MONITOR** FASW radio traffic by selecting Channel 1D or 1H as appropriate on CRS console.

6.3. **HAVE** CRO radio remain on Channel 1H with volume turned up.

7.0 **MAINTAIN** Control Room HABITABILITY.

7.1. **IF** a strong chemical odor is present in Control Room
OR nature of spill makes atmospheric chemical intrusion into Control Room a possibility,
THEN:

7.1.1. **SECURE** toilet exhaust fan.

7.1.2. **CONSIDER** SCBA respiratory protection for operators.

8.0 **DETERMINE** status of spill response.

8.1. **DIRECT** FASW **TO EVALUATE** whether spill is a "reportable hazardous material release" for making offsite notifications **PER** Hazardous Material and Oil Spill Response Plan.

8.2. **DETERMINE** if Operational Technical Assistant (OTA) should report to scene to provide Operations Oversight of Spill Response.

8.2.1. **IF** dispatched,
THEN HAVE OTA select Radio Channel 1H to monitor for operational concerns.

8.3. **DETERMINE** if Incident Command response should be established based on conditions at scene.

NOTE

FASW can directly communicate with offsite responding units on Radio Channel 1E.

8.3.1. **CALL** for Offsite Assistance by contacting CAS/SAS (495-4695).

9.0 **REVIEW** Emergency Action Levels.

9.1. **REVIEW** EALs based on event considering impact on accessing plant areas.

9.2. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel, the appropriate attachment based on event classification.

10.0 **CONTINUE** to monitor event **AND** direct assistance to scene as requested by FASW or Scene Leader.

10.1. **REVIEW** Hazardous Material and Oil Spill Response Plan for mitigating actions.

10.2. **IMPLEMENT** actions **PER** Response Plan, Scene Leader, and OTA.

10.3. **CONSIDER** securing or realigning ventilation and sumps impacted by scene.

10.4. **CONSIDER** methods to contain spill until clean up can be affected.

10.5. **CONSIDER** evacuation, restricting access, or isolation of certain areas to maintain personnel safety.

10.6. **CONSIDER** strategies for maintaining access to areas and equipment, especially Safety Related and safe shutdown areas/equipment.

10.7. **EVALUATE** need to call in additional operators to assist with spill or to assume watch stations to allow other operators to assist with incident.

11.0 **UPDATE** station on event progress via announcements, as appropriate.

12.0 **TERMINATE** event, as follows:

12.1. **WHEN** notified by FASW or Scene Leader that event may be terminated **AND** if station announcements were made, **THEN ANNOUNCE**:

"Now secure from the Hazardous Material Spill. Now secure from the Hazardous Material Spill."

12.2. **ENSURE** equipment and areas secured as part of spill response are restored as appropriate.

12.3. **REVIEW** Regulatory Reporting **AND** PCB Management procedures for any necessary reports.

Termination: Time: _____ **Date:** _____

Attachment 23, Containment Evacuation

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Reason for Evacuation:_____

Existing Radiological Hazards: _____

Evacuation Routes: ___ East Stairwell ___West Stairwell ___ Both

Exit Points: ___ EAL ___ PAL ___ Eq Hatch

Assembly Area: ___ Containment Airlock Access ___ Spent Fuel Pool Area
___ Butler Bldg ___ Controlled Area Access

2.0 **INITIATE** Containment evacuation.

NOTE

Announcements in Containment are difficult to understand. Radiation Protection must initiate their evacuation plan to ensure all personnel are properly notified.

2.1. **CONTACT** Radiation Protection (and Outage Management) **AND**
PROVIDE them with above details **AND**
DIRECT them to initiate containment evacuation.

2.2. **SOUND** Emergency Alarm for 5 seconds.

2.3. **ANNOUNCE**: "Evacuate Unit-1 (2) Containment."

2.3.1. **DESCRIBE** reason for evacuation.

2.4. **ANNOUNCE**: "Radiation Protection assemble and account for personnel."

2.5. **REPEAT** once.

3.0 **CONFIRM AND MONITOR** response.

3.1. **CONFIRM** evacuation is underway by contacting Radiation Protection via phone or radio.

3.2. **NOTIFY** Security (495-4695) of Containment Evacuation.

FORWARD THIS ATTACHMENT TO THE DIRECTOR – EMERGENCY PREPAREDNESS.

Attachment 23, Containment Evacuation (Continued)

3.3. **RECEIVE** report status of accountability **AND** missing personnel from security.

3.4. **IF** personnel are missing
AND conditions allow time for search and rescue,
THEN NOTIFY Radiation Protection, First Aid Team, and Security to initiate search and rescue efforts.

3.5. **IF** an accidental release of radioactivity is occurring,
THEN IMPLEMENT Radiological Event attachment in parallel.

3.6. **CONSIDER** establishment of Containment Closure to limit release of radioactivity. (Not to interfere with evacuation.)

3.7. **PROVIDE** updates via station announcements on plant conditions as appropriate.

4.0 **REVIEW** Emergency Action Levels (EALs).

4.1. **REVIEW** EALs based on existing conditions.

4.2. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel, the appropriate attachment based on event classification.

5.0 **TERMINATE** event, as follows:

5.1. **WHEN** Containment evacuation is complete
OR no longer needed,
THEN:

5.1.1. **TERMINATE** the event.

5.1.2. **ANNOUNCE**:

"Unit 1 (2) Containment Evacuation is now complete."

OR

"Containment Evacuation is no longer needed. Normal Access to the Containment is restored."

5.2. **REVIEW** Regulatory Reporting procedure for any necessary reports.

Termination: Time: _____ **Date:** _____

FORWARD THIS ATTACHMENT TO THE DIRECTOR – EMERGENCY PREPAREDNESS.

Attachment 24, Security

NOTE

- Bases **[B1159] [B1162] [B1167] [B1168] [B1200] [B1833]** apply to this entire attachment.
- The Shift Manager should apply situational judgment, and work with Security Shift Supervisor to determine and coordinate actions required in this attachment. The Shift Manager may deviate from this procedure to protect safety of Plant Personnel or health/safety of public.
- Section 1.0, Assess the Emergency, is continuously applicable while performing this attachment.

The following information dictates required action in subsequent sections:

- **Large Threat Aircraft** –
  An Airliner heading to CCNPP **OR** a non-airliner that has been identified as a large threat aircraft by NRC or NORAD and is heading to CCNPP.
- **Imminent Airborne Threat –**
  A large threat aircraft that is <u>less than</u> 5 minutes from station;
  A large threat aircraft is locally observed heading to CCNPP;
  Shift Manager's Judgment that an approaching aircraft is a large threat.
- **Probable Airborne Threat –**
  Large threat aircraft that is <u>greater than</u> 5 minutes but <u>less than</u> 30 minutes from station.
- **Informational Airborne Threat –**
  Any aircraft threat that is <u>greater than</u> 30 minutes from station.

A non-airliner aircraft that is **NOT** a large threat should only require performance of Section 4.0, Informational Airborne Threat.

1.0 ASSESS THE EMERGENCY.

1.1. **GO** to applicable section of this attachment:

- Section 2.0, Imminent Airborne Threat
- Section 3.0, Probable Airborne Threat
- Section 4.0, Informational Airborne Threat
- Section 5.0, Confirmed Armed Intrusion into the Protected Area
- Section 6.0, Confirmed Armed Intrusion into the Owner Controlled Area

Attachment 24, Security (Continued)

1.1 (Continued)

- Section 7.0, Confirmed Security Threat Identified by Nuclear Security Shift Supervisor
- Section 8.0, Station-Specific Imminent Alert from National Terrorism Advisory System (NTAS)
- Section 9.0, Non-Station-Specific Imminent Alert from National Terrorism Advisory System (NTAS)
- Section 10.0, Additional Actions to Evaluate as Appropriate to the Situation
- Section 11.0, ERO Notification
- Section 12.0, Event Termination

1.2. **CLASSIFY** event **PER** Emergency Action Level Documents (EAL-TB, EAL-HOT, EAL-COLD) concurrently with continuing this attachment.

1.2.1. **RECALL** extra operations and emergency response personnel to alternate emergency response locations.

1.3. **IF** Threat Alert condition changes,
THEN:

1.3.1. **CALL** Security at 495-4682.

1.3.2. **REASSESS** applicable section chosen in Step 1.1.

1.3.3. **REFER** to Section 10, Additional Actions to Evaluate as Appropriate to the Situation, for other actions necessary for security event.

2.0 IMMINENT AIRBORNE THREAT

NOTE

The reactors are not to be tripped before threat notification is validated as credible; however, this section is to be performed concurrent with validation.

2.1. **IF ANY** of the following conditions are met:

- Notification by NRC or NORAD that a large-threat aircraft is heading toward CCNPP **AND** is in 5 minutes of station.
- Notification of an airborne threat to CCNPP from sources other than NRC or NORAD, that is specific and credible, of a small aircraft heading toward station that presents a greater threat than its size would indicate **AND** is in 5 minutes of station.
- Shift Manager's judgment an approaching aircraft is a threat.
- A large-threat aircraft is locally observed.

THEN threat is **IMMINENT**.

2.2. **IF** airborne threat is **Imminent** (less than 5 minutes)
AND is **credible**,
THEN:

2.2.1. **CONCURRENTLY** with the following steps, **VALIDATE** authenticity of incoming call as follows:

1. **IF** call is from NRC, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call using daily authentication code.

2. **IF** call is from NORAD, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call with NRC using daily authentication code.

3. **IF** call is from any other source other than NRC or NORAD, **THEN** threat must still be validated by calling NRC using daily authentication code.

Attachment 24, Security (Continued)

2.2 (Continued)

2.2.2. **IF** airborne threat is Imminent
AND is Credible,
THEN TRIP both Reactors **AND IMPLEMENT** EOP-0.

2.2.3. **MAINTAIN OR REGAIN** continuous communication lines between original threat source and any available Operations Personnel.

2.2.4. **IF** NRC did NOT notify station of airborne threat,
THEN NOTIFY NRC as soon as practical, but within 15 minutes of security threat **AND MAINTAIN CONTINUOUS COMMUNICATION**.

2.2.5. **NOTIFY** Plant Personnel by performing the following:

1. **SOUND** emergency Public Address (PA) alarm for 5 seconds.

2. **ANNOUNCE** "Attention all plant personnel. Attention all plant personnel. An Imminent Aircraft Threat exists. [[

]]

3. **REPEAT** Steps 2.2.5.1 and 2.2.5.2 once.

4. **REPEAT** Steps 2.2.5.1 and 2.2.5.2 as updated information becomes available.

Attachment 24, Security (Continued)

NOTE

IF threat is during daylight hours or time does not permit, **THEN** Shift Manager may defer from opening lighting breakers.

2.2.6. **SECURE** Priority 1 lighting as follows:

1. **DIRECT** Operations to secure the following:

   a. [[

   •
   •
   •
   •

   ]]

2. **DIRECT** Security Shift Supervisor to secure the following:

   a. [[

   •
   •
   •]]

2.2.7. **NOTIFY** Security Shift Supervisor of NRC notification and evacuation.

2.2.8. [[

]]

2.2.9. **IF** handling fuel,
THEN NOTIFY Fuel Handling Supervisor to **PLACE** fuel assemblies in secure locations **AND DISCONTINUE** fuel handling operations.

2.2.10. **START** Emergency Diesel Generators but do **NOT** load them onto bus.

2.2 (Continued)

2.2.11. **MAINTAIN** Steam Generator water level high in normal band.

2.2.12. **VERIFY** Control Room ventilation in recirculation mode.

2.2.13. **IF** communications were NOT continuously maintained, **THEN RE-ESTABLISH** communication with NRC Headquarters as soon as practical after aircraft impact **OR** within 5 minutes after anticipated impact time if no impact occurs.

2.2.14. Following aircraft attack, **EVALUATE** recalling ERO from alternate ERFs to staff designated ERFs as appropriate.

2.2.15. **PERFORM** additional items from Section 3, Probable Airborne Threat, as time permits.

3.0 PROBABLE AIRBORNE THREAT

NOTE

- If the airborne threat escalates to Imminent (5 minutes or less), then the actions of Section 2 should be performed.
- The reactors are not to be tripped before threat notification is validated as credible; however, this section is to be performed concurrent with validation.

3.1. **IF** airborne threat is **Probable** (greater than 5 minutes but less than 30 minutes),
THEN:

3.1.1. **CONCURRENTLY** with the following steps, **VALIDATE** authenticity of incoming call as follows:

1. **IF** call is from NRC, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call using daily authentication code.

Attachment 24, Security (Continued)

3.1.1 (Continued)

2. **IF** call is from NORAD, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call with NRC using daily authentication code.

3. **IF** call is from any other source other than NRC or NORAD, **THEN** threat must still be validated by calling NRC using daily authentication code.

3.1.2. **MAINTAIN** continuous communication lines between original threat source and any available Operations Staff.

1. **IF** original threat notification source is not NRC HQ Operations Center,
   THEN ESTABLISH continuous communication with NRC HQ Operations Center at earliest practical

NOTE

IF threat is during daylight hours or time does not permit, **THEN** Shift Manager may defer from opening lighting breakers.

3.1.3. **SECURE** Priority 1 lighting per Step 2.2.6.

3.1.4. **SECURE** Priority 2 lighting as follows:

1. **DIRECT** Operations to secure the following:

   a. [[

   •

   b.

   •]]

Attachment 24, Security (Continued)

3.1.4 (Continued)

2. **DIRECT** Security Shift Supervisor to secure the following:

a. [[

-
-

b.

-

c.

-
-

]]

3.1.5. [[

]]

3.1.6. **IF** handling fuel,
THEN NOTIFY Fuel Handling Supervisor to **PLACE** fuel assemblies in secure locations **AND DISCONTINUE** fuel handling operations.

Attachment 24, Security (Continued)

3.1 (Continued)

3.1.7. **NOTIFY** Plant Personnel by performing the following:

1. **SOUND** emergency Public Address (PA) alarm for 5 seconds.

2. **ANNOUNCE** "Attention all plant personnel. Attention all plant personnel. A Probable Aircraft Threat exists.
[[

]]

3. **REPEAT** Steps 3.1.7.1 and 3.1.7.2 once.

4. **REPEAT** Steps 3.1.7.1 and 3.1.7.2 as updated information becomes available.

3.1.8. **IF** NRC **DID NOT** notify station of airborne threat, **THEN NOTIFY** NRC as soon as practical, but within 15 minutes of security threat **AND MAINTAIN CONTINUOUS COMMUNICATION**.

3.1.9. **NOTIFY** Security Shift Supervisor of NRC notification and evacuation.

NOTE

The reactors are *not* to be shutdown before threat notification is validated as credible; however, this section is to be performed concurrent with validation.

3.1.10. **IF** Probable airborne threat notification is credible, **THEN COMMENCE** a rapid downpower of **BOTH** units.

1. **IF** airborne threat notification is <u>not</u> credible, **THEN COMMENCE** only a rapid downpower of **BOTH** units if/when validated as credible and probable.

Attachment 24, Security (Continued)

3.1 (Continued)

3.1.11. **PLACE** Control Room ventilation in recirculation mode.

3.1.12. **VERIFY** closed Control Room doors, all Fire Doors, all Watertight Doors and Turbine Building Rolling Doors.

3.1.13. **DISPERSE** fire brigade to secondary fire brigade locker **AND STATION** fire engine away from target areas, not to interfere with plant operations.

3.1.14. **STATION** personnel at DGs to start when required **PER** Shift Manager.

3.1.15. **START** fire pumps as needed to pressurize fire header.

3.1.16. **IF** in **MODE 5 or 6**,
THEN SECURE containment purge **AND ESTABLISH** containment Closure/integrity.

3.1.17. **SUSPEND** in-progress surveillance testing **AND RETURN** affected equipment to functional status.

3.1.18. **SUSPEND** in-progress maintenance activities **AND RETURN** affected equipment to functional status.

3.1.19. **INITIATE** action to restore inoperable ECCS equipment to operable status.

3.1.20. **ENSURE** systems are available for reactor shutdown and ATWS mitigation (RPS).

3.1.21. **IF** leakage is indicated,
THEN CONSIDER isolating shutdown cooling **PER** AOP-3B.

3.1.22. **COMMENCE** fill of CSTs to upper limit of operating band.

3.1.23. **VERIFY** other makeup water source inventories are above established minimums (DWST, PWST).

3.1.24. **ENSURE** decay heat removal systems available (AFW, SDC, main condenser).

3.1.25. **IF** leakage is indicated,
THEN CONSIDER isolating SFP cooling **PER** AOP-6F.

3.1 (Continued)

3.1.26. **NOTIFY** Radiation Protection personnel to relocate with Survey Vehicle **AND** emergency kits outside Protected Area.

3.1.27. **STATION** operators at remote shutdown panels.

3.1.28. **WHEN** plant conditions allow,
THEN SECURE all possible station building fans to limit number of building supply and exhaust fans.

3.1.29. **MINIMIZE** number of operating turbine building fans.

3.1.30. After aircraft impact, **EVALUATE** recalling ERO from Alternate ERFs to staff normal ERFs as appropriate.

3.1.31. **PERFORM** additional items from Section 4, Informational Airborne Threat as time permits.

4.0 INFORMATIONAL AIRBORNE THREAT

4.1. **IF** airborne threat escalates to Imminent (5 minutes or less), **THEN** actions of Section 2, Imminent Airborne Threat_ should be performed.

4.2. **IF** airborne threat escalates to Probable (greater than 5 minutes but less than 30 minutes), **THEN** actions of Section 3, Probable Airborne Threat, should be performed.

4.3. **IF** airborne threat is **Informational** (greater than 30 minutes),
THEN:

4.3.1. **CONCURRENTLY** with the following steps, **VALIDATE** authenticity of incoming call as follows:

1. **IF** call is from NRC, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call using daily authentication code.

2. **IF** call is from NORAD, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call with NRC using daily authentication code.

Attachment 24, Security (Continued)

4.3.1 (Continued)

3. **IF** call is from any other source other than NRC or NORAD, **THEN** threat must still be validated by calling NRC using daily authentication code.

4.3.2. **MAINTAIN** continuous communication lines between original threat source and any available Operations Staff.

4.3.3. **IF** NRC **DID NOT** notify station of airborne threat, **THEN NOTIFY** NRC as soon as practical, but within 15 minutes of security threat **AND MAINTAIN CONTINUOUS COMMUNICATION**.

4.3.4. **SECURE** Priority 1 lighting per Step 2.2.6.

4.3.5. **SECURE** Priority 2 lighting per Step 3.1.4.

4.3.6. **SECURE** Priority 3 lighting as follows:

1. **DIRECT** Operations to secure the following:

- [[

]]

4.3.7. **NOTIFY** Security Shift Supervisor of NRC notification and evacuation.

4.3.8. **IF** handling fuel, **THEN NOTIFY** Fuel Handling Supervisor to **PLACE** fuel assemblies in secure locations **AND DISCONTINUE** fuel handling operations.

Attachment 24, Security (Continued)

4.3 (Continued)

NOTE

The following personnel do not evacuate subsequent to evacuation announcement:

- [[
-
-]]
- On-shift Nuclear Security personnel

4.3.9. **NOTIFY** Plant Personnel by performing the following:

1. **SOUND** the emergency Public Address (PA) alarm for 5 seconds.

2. **ANNOUNCE** "Attention all plant personnel. Attention all plant personnel. An Informational Aircraft Threat exists. [[

]]

3. **REPEAT** Steps 4.3.9.1 and 4.3.9.2 once.

4. **REPEAT** Steps 4.3.9.1 and 4.3.9.2 as updated information becomes available.

4.3.10. **PREPARE** to commence a rapid down power of **BOTH** units.

4.3.11. **PLACE** Control Room ventilation in recirculation mode.

4.3.12. **NOTIFY** Security Shift Supervisor that security lights will be turned off if airborne threat escalates to **IMMINENT** or **PROBABLE**.

Attachment 24, Security (Continued)

4.3 (Continued)

4.3.13. **RECALL** personnel from NOF as needed to supplement Operations.

4.3.14. **PREPARE** to disperse fire brigade **AND** **STATION** fire engine away from target areas, not to interfere with plant operations.

4.3.15. **PREPARE** to station personnel at DGs to start when required **PER** Shift Manager.

4.3.16. **STOP** in-progress surveillance testing/maintenance **AND** **RETURN** equipment to functional status.

4.3.17. **START** fire pumps as needed to pressurize fire header.

4.3.18. **RESTORE** inoperable ECCS equipment to operable (LPSI, HPSI, CS).

4.3.19. **VERIFY** closed Control Room doors, all fire doors, all watertight doors and Turbine Building rolling doors.

4.3.20. **IF** in **MODE 5 or 6,** **THEN SECURE** containment purge **AND ESTABLISH** containment Closure/integrity.

4.3.21. **INITIATE** action to restore inoperable ECCS equipment to operable status.

4.3.22. **ENSURE** systems are available for reactor shutdown and ATWS mitigation (RPS).

4.3.23. **IF** leakage is indicated, **THEN CONSIDER** isolating shutdown cooling **PER** AOP-3B.

4.3.24. **COMMENCE** fill of CSTs to the upper limit of operating band.

4.3.25. **VERIFY** other makeup water source inventories are above established minimums (DWST, PWST).

4.3.26. **ENSURE** decay heat removal systems available (AFW, SDC, main condenser).

4.3.27. **IF** leakage is indicated, **THEN CONSIDER** isolating SFP cooling **PER** AOP-6F.

Attachment 24, Security (Continued)

4.3 (Continued)

4.3.28. **NOTIFY** Radiation Protection personnel to relocate with Survey Vehicle and emergency kits outside Protected Area.

4.3.29. **STATION** operators at remote shutdown panels.

4.3.30. **WHEN** plant conditions allow,
THEN SECURE all possible station building fans to limit number of building supply and exhaust fans.

4.3.31. **MINIMIZE** number of operating turbine building fans.

4.3.32. After aircraft impact, **EVALUATE** recalling ERO from Alternate ERFs to staff normal ERFs as appropriate.

5.0 CONFIRMED ARMED INTRUSION INTO THE PROTECTED AREA

5.1. **IF** a confirmed armed intrusion into Protected Area has occurred,
THEN COORDINATE with Security to dispatch Plant Operators to take cover in the following locations:

- [[
-
-
-
-
-]]

NOTE

Any plant announcement should be coordinated with Security Shift Supervisor to evaluate best response for considering personnel safety.

5.2. **IF** it is deemed that Plant Personnel should *remain where they are*,
THEN NOTIFY Plant Personnel by performing the following:

5.2.1. **SOUND** Emergency Alarm for 5 seconds.

5.2.2. **ANNOUNCE** "Attention all Plant Personnel. The Station is under attack. Take cover immediately."

Attachment 24, Security (Continued)

5.2 (Continued)

5.2.3. **REPEAT** above notification once.

5.3. **IF** it is deemed that Plant Personnel should *evacuate* a certain area, **THEN NOTIFY** Plant Personnel by performing the following:

WARNING

Take into consideration nature of emergency in determining if people can be assembled and accounted for in normal NOF assembly area. Give directions for alternate assembly location as situation requires.

5.3.1. **SOUND** Emergency Alarm for 5 seconds.

5.3.2. **ANNOUNCE** "Attention all Plant Personnel, a security threat exists. Evacuate the following area(s) _____
by way of: _____
assemble at:_____
Report suspicious activities or persons to Nuclear Security on extension 911."

5.4. **REPEAT** above notification once.

5.5. **IF** notified by Security that intrusion into Protected Area is confirmed, **THEN TRIP BOTH REACTORS.**

5.6. **NOTIFY** the NRC as soon as practical, **BUT** within 15 minutes of security threat **AND MAINTAIN CONTINUOUS COMMUNICATION.**

6.0 CONFIRMED ARMED INTRUSION INTO THE OWNER CONTROLLED AREA

6.1. **IF** a confirmed armed intrusion into Owner Controlled Area has occurred, **THEN IMMEDIATELY DISPATCH** Plant Operators to take cover in the following locations:

- [[
-
-
-
-
-]]

NOTE

Any plant announcement should be coordinated with Security Shift Supervisor to evaluate best response for considering personnel safety.

6.2. **IF** it is deemed that Plant Personnel should *remain where they are*, **THEN NOTIFY** Plant Personnel by performing the following:

6.2.1. **SOUND** the Emergency Alarm for 5 seconds.

6.2.2. **ANNOUNCE** "Attention all Plant Personnel. The Station is under attack. Take cover immediately."

6.2.3. **REPEAT** above notification once.

Attachment 24, Security (Continued)

6.3. **IF** it is deemed that Plant Personnel should *evacuate* a certain area, **THEN NOTIFY** Plant Personnel by performing the following:

WARNING

Take into consideration nature of emergency in determining if people can be assembled and accounted for in normal NOF assembly area. Give directions for alternate assembly location as situation requires.

6.3.1. **SOUND** Emergency Alarm for 5 seconds.

6.3.2. **ANNOUNCE** "Attention all Plant Personnel, a security threat exists. Evacuate the following area(s) _____
by way of: _____
assemble at: _____
Report suspicious activities or persons to Nuclear Security on extension 911."

6.3.3. **REPEAT** above notification once.

6.3.4. **IF** notified by Security that intrusion into Protected Area is imminent,
THEN TRIP BOTH REACTORS.

6.3.5. **NOTIFY** the NRC as soon as practical, **BUT** within 15 minutes of security threat **AND MAINTAIN CONTINUOUS COMMUNICATION**.

7.0 CONFIRMED SECURITY THREAT IDENTIFIED BY NUCLEAR SECURITY SHIFT SUPERVISOR

7.1. **COORDINATE** with Nuclear Security to summon assistance from available offsite support agencies.

7.2. **IF** Security event does *not* present an imminent or ongoing threat to plant safety,
THEN PERFORM actions of Section 10, Additional Actions to Evaluate as Appropriate to the Situation, of this attachment.

7.3. **CONSIDER** performing the following security actions for lesser threat levels as needed:

- **IF** an Elevated Alert is issued:
  - **LIMIT** public access to sensitive plant information, including web sites that could facilitate the planning of terrorist acts, such as design information, plant layout drawings, probabilistic risk assessment models and results, and plant simulators.
  - **DIRECT** Information Technology (IT) to evaluate computer and communication networks for safety and security vulnerabilities including modem access vulnerabilities, and address as necessary.
  - **CONDUCT** training, including simulator training, and ensure operational readiness for loss of ultimate heat sink events.
  - **EVALUATE** potential vulnerabilities to maintain or restore core cooling, containment, and spent fuel cooling, as a result of loss of intake structure.
  - **PERIODICALLY REVIEW** plans for plant actions to be taken in event of a terrorist attack that is imminent or occurring.
  - **PERIODICALLY REVIEW** Safeguards and Emergency plans and take actions to assure that emergency onsite staffing, facilities, and procedures are adequate to accomplish actions necessary for response to terrorist threats.

Attachment 24, Security (Continued)

7.3 (Continued)

- **PERIODICALLY REVIEW** specific guidance and strategies to maintain or restore core cooling, containment, and Spent Fuel Pool Cooling capabilities using existing or readily available resources (equipment and personnel) that can be effectively implemented under circumstances associated with loss of large areas of plant due to explosions or fire.
- **DETERMINE AND REVIEW** potential effect on plant and onsite evacuation strategies from damage to nearby hazardous facilities and other nearby sites and modify procedures and equipment, as necessary.
- **REVIEW** Severe Accident Management Guidelines (SAMGs) to include additional strategies to address events involving an increased terrorist threat.
- **DIRECT** Operations Work Coordinator **AND** Work Week Manager to provide enhanced priority to maintenance activities related to fire protection and security-related systems.
- **DIRECT** Security/Emergency Preparedness to implement tools previously developed to communicate relevant information to public for example: use of web site.
- **ASSESS** whether threat requires further refinement of preplanned protective measures.
- **COORDINATE** with Security/Emergency Preparedness to notify appropriate local, state and federal agencies to enhance ability to carry out rapid response to a credible security threat.
- **ENSURE** emergency response plan is in a full state of readiness by completing a re-evaluation or retest of response personnel, response facilities, and communication systems including the Public Notification System.
- **CONSIDER** additional limits on access to hazardous material storage **AND** additional limits on quantities of hazardous materials within Protected Area.
- **DIRECT** Security to advise offsite medical support to be prepared in event of hostile action causing personnel injury or wounds.

7.3 (Continued)

- **CONSIDER** need to implement communication protocols as agreed upon with stakeholders.

7.4. **REVIEW AND CONSIDER** enhancements to integrated response plans with local law enforcement agencies, State and Federal organizations as appropriate.

8.0 STATION-SPECIFIC IMMINENT ALERT FROM NATIONAL TERRORISM ADVISORY SYSTEM (NTAS)

NOTE

National Terrorism Advisory System (NTAS) Threat Alerts are credible Threats.

8.1. **IF** Imminent Alert is station-specific,
THEN:

8.1.1. **NOTIFY** Plant personnel by performing the following:

1. **SOUND** Emergency Alarm for 5 seconds.

2. **ANNOUNCE** "Attention all Plant personnel. An Imminent Alert has been issued. Emergency Director, EOF Communicator, and Radiation Assessment Director report to the EOF.

3. **REPEAT** above notification once.

8.1.2. **EVALUATE** need to move Emergency Response Organization members if Emergency Response Facilities are already staffed

8.1.3. **COORDINATE** with Security Shift Supervisor to determine need to evacuate non-essential personnel.

8.1.4. **PREPARE** a staffing plan to ensure safe operation of plant with minimum personnel necessary to enable effective response to an event.

Attachment 24, Security (Continued)

8.1 (Continued)

8.1.5. **STAFF** Emergency Response Facilities (Key ERO only) by performing Section 11, ERO Notification.

1. **DETERMINE** with Security Shift Supervisor if staffing Alternative ERO facilities.

8.1.6. **COORDINATE** with Security/ERO to request offsite support, including local law enforcement agencies, State agencies, and Federal resources, as applicable.

9.0 NON-STATION-SPECIFIC IMMINENT ALERT FROM NATIONAL TERRORISM ADVISORY SYSTEM (NTAS)

9.1. **IF** an Imminent Alert has been issued
AND the threat is NOT station-specific,
THEN:

9.1.1. **STAFF** Emergency Response Facilities (Key ERO only) by performing Section 11.

9.1.2. **ALERT** Emergency Response Organization members of potential need to respond to an emergency using Section 11.

9.1.3. **COORDINATE** with Security/ERO to notify appropriate Federal agencies to ascertain their ability to carry out rapid response of available assets.

9.1.4. **DIRECT** Security to restrict access to facility to essential personnel only.

9.1.5. **DIRECT** Operations Work Control and Work Week Manager to implement Section 5.4, Increased Threat Level Plan of CNG-MN-4.01-1006.

9.1.6. **COORDINATE** with Security to summon required assistance from available offsite support agencies.

Attachment 24, Security (Continued)

10.0 ADDITIONAL ACTIONS TO EVALUATE AS APPROPRIATE TO THE SITUATION

NOTE

Before dispatching personnel into plant, Shift Manager shall evaluate if a Security Escort is required.

10.1. **CONSIDER** performing the following actions as time allows at discretion of Shift Manager:

- **TRIP OR PERFORM** a shutdown of **BOTH** Reactors as appropriate to situation.
- **START** all available Diesel Generators **PER** OI-21 series.
- **START** a Fire Pump **PER** OI-20.
- **PLACE** Control Room Post-LOCI filters in service **PER** OI-22F.
- **ACTIVATE** the Fire Brigade.
- **MAXIMIZE** CST inventories.
- **SECURE** blowdown **AND**
  MAXIMIZE capacity of make-up water systems.
- **ENSURE** all decay heat removal systems are available.
- CONSIDER cooldown.
- **ENSURE** containment closure is established, as applicable.
- **ENSURE** the RCS is *not* in reduced inventory.
- **NOTIFY** Plant Personnel to lockdown or assemble, as appropriate to situation.
- **EVALUATE** need for implementation of two-person rule IAW SY-AA-101-132.
- **ENSURE** SCBAs are moved from DAS Rooms into Control Room.
- **REFERENCE** ICA and FFSM for equipment that may be lost pending location of Security event.
- **EVALUATE** need to activate "All-Call Beeper System" **PER** OAP-02-01 for additional operators.
- **REVIEW** AOPs: 3F, 4A, 7A, 7I, and 7J.
- **REVIEW** EOPs: 2, 3, and 7.
- **SECURE** all Fuel Handling activities, including shutting RFP/SFP Transfer Gates, as applicable. **[B1168]**

10.1 (Continued)

- **ENSURE** SMECO 69kV line is available **AND** aligned to 23 Service Bus **PER** OI-27E.
- **EVALUATE** contacting Safety Services to monitor station for flammable or toxic gases.
- **EVALUATE** staffing Technical Support Center, as applicable.
- **EVALUATE** recalling extra Operations and Emergency Response personnel to alternate Emergency Response locations.
- **EVALUATE** the need for increased staffing to mitigate a Control System Cyber-Attack, as warranted. **[B2347]**
- **IF** sabotage event has occurred,
  THEN SM to **NOTIFY** TSO-Bulk Power **AND** CGG Generation Dispatch Desk.
- **CONSIDER** using Operations lights and cameras to aid Security in mitigating situation.
- **CONSIDER** using Spot Lights and thermal imaging equipment from on-site Fire Engines.

10.2. **IF** Security event has caused large losses of equipment,
THEN EVALUATE Attachment 25, Large Area Losses, to develop a recovery or mitigation strategy as applicable. **[B1168]**

10.3. **IF** Security event has *not* resulted in large losses of equipment,
THEN EVALUATION of Attachment 25, Large Area Losses, is optional.

11.0 ERO NOTIFICATION

11.1. **REFER** to EP-AA-112-100-F-57 ERONS NOTIFICATION DETAILS (CNG) for activation instructions.

Attachment 24, Security (Continued)

12.0 EVENT TERMINATION

WARNING

The post-event communication of threat information should be held as Safeguards Information until determined otherwise.

12.1. **AFTER** concurring with Security Shift Supervisor,
THEN ANNOUNCE "Now secure from Security Event."

12.2. **IF** PA system is disabled,
THEN DISPATCH a security officer, if available, to NOF to make accountability notification.

12.3. **ENSURE** equipment and areas are secured and restored as appropriate.

12.4. **REVIEW** regulatory reporting procedure for any necessary reports.

12.5. **FORWARD** all records of completion to Security as SAFEGUARDS information until event evaluation is complete.

Attachment 25, Large Area Losses

NOTE

Bases **[B1162] [B1168]** apply to entire attachment.

A. DETERMINE IF A LARGE AREA LOSS HAS OCCURRED

NOTE

- The Shift Manager should apply situational judgment, and work with Security Shift Supervisor to determine and coordinate actions required in this attachment. The Shift Manager may deviate from this procedure to protect safety of plant personnel or health/safety of the public.
- This procedure should be used if all or a substantial portion of a large area of plant has been damaged and rendered unavailable.

1.0 **IF** an event has occurred in which a large area of plant may have been lost, **THEN ASSESS** area(s) damaged **AND** extent of damage by:

a. control board indications

b. reports from Operations personnel outside Control Room

c. reports from Security **AND** other personnel outside Control Room

1.1 **IF** assessment indicates all areas of plant remain largely intact, **THEN EXIT** this attachment.

2.0 **IF** event <u>has not</u> already been classified **PER** Emergency Action Levels, **THEN REFER** to CNG-EP-1.01-1013, Emergency Classification and PAR, for event classification **AND CONTINUE** with this procedure.

2.1 **IF** event <u>has</u> been classified **PER** Emergency Action Levels, **THEN CONTINUE** with this procedure.

Attachment 25, Large Area Losses (Continued)

A. DETERMINE IF A LARGE AREA LOSS HAS OCCURRED (Continued)

NOTE

Any firefighting/ damage control activities should be undertaken with appropriate consideration given to any existing security concerns.

3.0 **REFER** to ERPIP-3.0 Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

B. DETERMINE THE APPLICABLE SECTION

NOTE

- This attachment may be exited when deemed appropriate by Shift Manager or Emergency Director.
- Steps of this attachment may be done concurrently and may be done concurrently with actions of other implemented attachments.

1.0 **DETERMINE** affected area(s) based on information obtained in Step A.1.0 above.

Attachment 25, Large Area Losses (Continued)

B. DETERMINE THE APPLICABLE SECTION (Continued)

NOTE

If a system or component in area identified as lost is available, it may be used as appropriate.

2.0 **IMPLEMENT** section(s) of this attachment for affected area(s). [C. through U.]

C. INTAKE STRUCTURE

NOTE

The following areas may have been damaged along with Intake Structure:

- North Service Building
- Turbine Building

1.0 **Assumptions:**

a. Units 1 and 2 have a total loss of CW (although a total loss of all CW is unlikely).

b. Total loss of Saltwater.

2.0 **Both Units:**

a. **IMPLEMENT** EOPs.

b. **REFER** to AOP-7A (Loss of Saltwater) as necessary.

c. **REFER** to AOP-6F (Loss of Spent Fuel Pool Cooling), if necessary.

d. **COOLDOWN** using ADVs and AFW. Will probably only be able to cooldown to 225°F. Can **NOT** go on SDC until SDC HX is available.

C. INTAKE STRUCTURE (Continued)

e. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

f. **REFER** to SAM ERPIP-611, Attachment 1, for alternate lineups, **AND** ERPIP-604 for CHLAs addressing the loss of CNMNT cooling as needed.

g. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

D. HYDROGEN STORAGE TANKS

NOTE

The following areas may have been damaged along with Hydrogen Storage Tanks:

- Tank Farm
- Turbine Building

1.0 **Assumptions:**

a. Hydrogen Storage Tanks rupture causing a large outside fire.

b. Hydrogen is isolated to Turbine Building.

c. Unit 1 Turbine Building sustains damage to structure, but unit remains online.

d. Loss of Control Room and Heater Drain Pump Chiller Units.

e. Loss of Auxiliary Boiler capability.

f. Complete loss of all tanks in tank farm.

D. HYDROGEN STORAGE TANKS (Continued)

2.0 **Both Units:**

a. **IF** adequate inventory exists, **THEN PERFORM** a controlled shutdown/cooldown **PER** the OPs.

a.1 **IF** adequate inventory does **NOT** exist, **THEN MAINTAIN** mode 3 (as in EOP-7) until a makeup source can be aligned.

b. **SECURE** blowdown system per OI-8A to conserve inventory (consider shutting MSIVs).

c. **ENTER** Mode 4 **AND INITIATE** Shutdown cooling.

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachment 1, for alternate lineups, as necessary.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

E. UNIT 1 & UNIT 2 TURBINE BUILDING

NOTE

The Auxiliary Building may have been damaged along with U1 & U2 Turbine Building.

1.0 **Assumptions:**

a. Both Units trip or manual trip is actuated.

b. Main Feedwater is lost as well as condenser.

c. No Safe Shutdown Equipment (SSE) is affected.

Attachment 25, Large Area Losses (Continued)

E. UNIT 1 & UNIT 2 TURBINE BUILDING (Continued)

2.0 **Both Units:**

a. **IMPLEMENT** EOPs.

b. **IF** necessary,
THEN SHUT MSIVs to minimize Excess Steam Demand and Isolate Main Feed.

c. **COOLDOWN** using AFW and ADVs, until units are placed on SDC.

d. **SECURE** blowdown system per OI-8A to conserve inventory (consider shutting MSIVs).

e. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

f. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

g. **START** SWACs **AND**
REFER to AOP-7D for loss of air, as necessary.

h. **REFER** to AOP-7I for loss of busses, as necessary.

i. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

F. UNIT 1 TURBINE BUILDING

NOTE

The following areas may have been damaged along with U1 Turbine Building:

- Auxiliary Building
- Hydrogen Storage Tanks
- U2 Turbine Building

1.0.A **Unit 1 Assumptions:**

a. Unit 1 trips or manual trip is actuated.

b. Main Feedwater lost as well as condenser.

c. No Safe Shutdown Equipment (SSE) is affected.

d. Hydrogen Storage Tanks rupture, causing a large outside fire.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **IF** necessary, **THEN SHUT** MSIVs to minimize Excess Steam Demand **AND ISOLATE** Main Feed.

c. **COOLDOWN** using AFW and ADVs until units are placed on SDC.

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

F. UNIT 1 TURBINE BUILDING (Continued)

f. **START** SWACs and refer to AOP-7D for loss of air, as necessary.

g. **REFER** to AOP-7I for loss of busses, as necessary.

h. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 2 Assumptions:**

a. Unit may trip on turbine malfunctions or be tripped due to loss of feed or condenser.

2.0.B **Unit 2:**

a. **IF** unit did not trip,
THEN CONSIDER IMPLEMENTING AOP-7E for Turbine Malfunctions or trip unit.

b. **PERFORM** a controlled shutdown/cooldown PER OPs, as necessary.

c. **IF** unit tripped,
OR was manually tripped,
THEN IMPLEMENT EOPs.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

e. **START** SWACs **AND**
REFER to AOP-7D for loss of air, as necessary.

f. **REFER** to AOP-7I for loss of busses, as necessary.

G. U2 TURBINE BUILDING

NOTE

The following areas may have been damaged along with U2 Turbine Building:

- Auxiliary Building
- U1 Turbine Building

1.0.A **Unit 2 Assumptions:**

a. Unit 2 trips or manual trip is actuated.

b. Main Feedwater lost as well as condenser.

c. No Safe Shutdown Equipment (SSE) is affected.

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **IF** necessary,
THEN SHUT MSIVs to minimize Excess Steam Demand and Isolate Main Feed.

c. **COOLDOWN** using AFW and ADVs, until units are placed on SDC.

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

Attachment 25, Large Area Losses (Continued)

G. U2 TURBINE BUILDING (Continue)

f. **REFER** to AOP-7I for loss of busses, as necessary.

g. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Unit may trip on Turbine Malfunctions or be tripped due to loss of feed or condenser.

2.0.B **Unit 1:**

a. **IF** unit did not trip, **THEN CONSIDER IMPLEMENTING** AOP-7E for Turbine Malfunctions or trip unit.

b. **PERFORM** a controlled shutdown/cooldown PER OPs, as necessary.

c. **IF** unit tripped, **OR** was manually tripped, **THEN IMPLEMENT** EOPs.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

e. **START** SWACs and **REFER** to AOP-7D for loss of air, as necessary.

f. **REFER** to AOP-7I for loss of busses, as necessary.

Attachment 25, Large Area Losses (Continued)

H. 21 RWT

NOTE

The following areas have been damaged along with 21 RWT:

- U2 Containment
- 21 Fuel Oil Storage Tank
- P-13000-2 Transformer
- U2 Metal Clad
- 2B DG
- RWT Pump Room

1.0.A **Unit 2 Assumptions:**

a. May trip on partial Loss of Offsite Power (P-13000-2), otherwise a shutdown or manual trip will be initiated.

b. 21 4KV Bus remains energized. 24 4KV Bus is lost.

c. 2B DG is unavailable.

d. Without 21 RWT, boration and makeup water is from 21/22 BAST and 11 DI Storage Tank.

e. Power lost to various support plant buildings.

f. U2 CNMNT has no penetrable damage.

g. U2 West Pen Room sustains structural damage only.

Attachment 25, Large Area Losses (Continued)

H. 21 RWT (Continued)

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 21 RWT and 11 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 22, 23, and 24 4KV Busses to alternate feeds PER OI-27C.

e. **REALIGN** 2B DG, if it becomes available, to 11 FOST PER OI-21D.

f. **RESTORE** station power to support buildings via the 69KV SMECO feed via OI-27B and Electrical Maintenance.

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Loss of 14 4KV Bus until picked up by 1B DG.

Attachment 25, Large Area Losses (Continued)

H. 21 RWT (Continued)

2.0.B **Unit 1:**

a. **IMPLEMENT** AOP-7I for loss of 14 4KV Bus. Unit may stay online.

b. **REALIGN** 14 4KV Bus to its alternate feed PER OI-27C.

c. **REALIGN** 1B DG to 11 FOST PER OI-21D within 2 hours, if carrying the 14 4KV Bus.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

I. U1 AUXILIARY BUILDING NORTHWEST SECTION

NOTE

The following areas may have been damaged along with U1 Auxiliary Building Northwest Section:

- 11 RWT
- U1 Containment
- 1B DG
- 2A DG

1.0.A **Unit 1 Assumptions:**

a. Without 11 RWT, boration and makeup water is from BAST and DI Storage Tank.

b. Loss of 1B DG.

c. Possible damage to 69' Electrical RM (MCCs 114, 105, 115, 102).

d. Loss of 1-2 Auxiliary Building Supply Fans. Loss of negative pressure in Spent Fuel Pool Area.

Attachment 25, Large Area Losses (Continued)

I. U1 AUXILIARY BUILDING NORTHWEST SECTION (Continued)

2.0.A **Unit 1:**

a. **IMPLEMENT** AOP-7I for loss of MCCs.

b. **IMPLEMENT** AOP-7D for loss of instrument air, as necessary.

c. **SHUTDOWN/COOLDOWN** PER OPs to Mode 5, (1 DG, 72 hour Tech Spec).

d. **IF** Reactor trips, **THEN IMPLEMENT** EOPs.

e. **IMPLEMENT** applicable OI-22 series procedure for Auxiliary Building Ventilation systems.

f. **IF** RWT makeup is required, **THEN TIE** 11 RWT **AND** 21 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 2 Assumptions:**

a. Unit remains online.

b. Loss of 2A DG.

2.0.B **Unit 2:**

a. **SHUTDOWN/COOLDOWN PER** OPs to Mode 5, (1 DG, 72 hour Tech Spec).

I. U1 AUXILIARY BUILDING NORTHWEST SECTION (Continued)

b. **IF** reactor trips,
THEN IMPLEMENT EOPs.

c. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary

J. U2 AUXILIARY BUILDING SOUTHWEST SECTION

NOTE

The following areas may have been damaged along with U2 Auxiliary Building Southwest Section:

- 21 RWT
- U2 Containment
- 2B DG

1.0.A **Unit 2 Assumptions:**

a. Without 21 RWT, boration and makeup water is from BAST and DI Storage Tank.

b. Loss of 2B DG.

c. Possible damage to 69' Electrical RM (MCCs 214, 205, 215, 202).

d. Possible damage to Spent Resin Metering Tank, elevating radiation doses in 45' Auxiliary Building.

e. Loss of 1-2 Auxiliary Building Supply Fans. Loss of negative pressure in Spent Fuel Pool Area.

J. U2 AUXILIARY BUILDING SOUTHWEST SECTION (Continued)

2.0.A **Unit 2:**

a. **IMPLEMENT** AOP-7I for loss of MCCs.

b. **IMPLEMENT** AOP-7D for loss of instrument air, as necessary.

c. **IF** reactor trips,
THEN IMPLEMENT EOPs.

d. **SHUTDOWN/COOLDOWN** PER OPs to Mode 5, (1 DG, 72 hour Tech Spec)

e. **IMPLEMENT** applicable OI-22 series procedure is for Auxiliary Building Ventilation systems.

f. **IF** RWT makeup is required,
THEN TIE 21 RWT **AND** 11 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, Large Area Fire Loss, as necessary.

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Unit 1 remains online.

Attachment 25, Large Area Losses (Continued)

K. U2 CONTAINMENT

NOTE

The following areas may have been damaged along with U2 Containment:

- 21 RWT
- U2 High-Side Disconnects
- 2B DG
- Auxiliary Building Roof

1.0.A **Unit 2 Assumptions:**

a. RPS trip on Loss of Load, otherwise a shutdown or manual trip will be initiated.

b. Without 21 RWT, boration and makeup water is from BAST and DI Storage Tank.

c. CNMNT is not penetrated.

d. Steamline breaks may occur.

e. 2B DG is unavailable.

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 21 RWT **AND** 11 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

K. U2 CONTAINMENT (Continued)

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Unit 1 remains online.

L. 21 FUEL OIL STORAGE TANK

NOTE

The following areas may have been damaged along with 21 Fuel Oil Storage Tank:

- 21 RWT
- P-13000-2 Transformer
- U2 Metal Clad
- U2 Containment

1.0.A **Unit 2 Assumptions:**

a. May trip on partial Loss of offsite Power (P-13000-2), otherwise a shutdown or manual trip will be initiated.

Attachment 25, Large Area Losses (Continued)

L. 21 FUEL OIL STORAGE TANK (Continued)

b. 21 4KV Bus remains energized. 24 4KV Bus is powered from 2B DG.

c. Without 21 RWT, boration and makeup water is from 21/22 BAST and 11 DI Storage Tank.

d. Power lost to various support buildings.

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 21 RWT **AND** 11 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 22, 23, and 24 4KV Busses to alternate feeds PER OI-27C.

e. **REALIGN** 2B DG to 11 FOST PER OI-21D within 2 hours, if carrying 24 4KV bus.

f. **RESTORE** station power to support buildings via 69KV SMECO feed via OI-27B and Electrical Maintenance.

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

Attachment 25, Large Area Losses (Continued)

L. 21 FUEL OIL STORAGE TANK (Continued)

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Loss of 14 4KV Bus until picked up by 1B DG.

2.0.B **Unit 1:**

a. **IMPLEMENT** AOP-7I for loss of 14 4KV Bus. Unit may stay online.

b. **REALIGN** 14 4KV Bus to its alternate feed PER OI-27C.

c. **REALIGN** 1B DG to 11 FOST **PER** OI-21D within 2 hours, if carrying 14 4KV Bus.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

e. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

M. U1 CONTAINMENT

NOTE

The following areas may have been damaged along with U 1 Containment:

- 11 RWT
- 1B DG
- 2A DG
- U1 High-Side Disconnects
- Auxiliary Building Roof

1.0.A **Unit 1 Assumptions:**

a. RPS trip on Loss of Load, otherwise a shutdown or manual trip will be initiated.

b. Without 11 RWT, boration and makeup water is from BAST and DI Storage Tank.

c. CNMNT is not penetrated.

d. Steamline breaks may occur.

e. 1B DG is unavailable.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

M. U1 CONTAINMENT (Continued)

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 11 RWT **AND** 21 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 2 Assumptions:**

a. 2A DG is unavailable. Unit 2 remains online.

Attachment 25, Large Area Losses (Continued)

N. P-13000-2 TRANSFORMER AND U2 METAL CLAD

NOTE

The following areas may have been damaged along with P-13000-2 Transformer and U2 Metal Clad:

- 21 Fuel Oil Storage Tank
- 21 RWT

1.0.A **Unit 2 Assumptions:**

a. RPS trip on partial Loss of Offsite Power (P-13000-2), otherwise a shutdown or manual trip will be initiated.

b. 21 4KV Bus remains energized. 24 4KV bus is powered from 2B DG.

c. Without 21 RWT, boration and makeup water is from 21/22 BAST and 11 DI Storage Tank.

d. Power lost to various support buildings.

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 21 RWT **AND** 11 RWT (**REFER** to ERPIP 611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 22, 23, and 24 4KV Busses to alternate feeds PER OI-27C.

e. **REALIGN** 2B DG to 11 FOST PER OI-21D within 2 hours, if carrying 24 4KV Bus.

N. P-13000-2 TRANSFORMER AND U2 METAL CLAD (Continued)

f. **RESTORE** station power to support buildings via the 69KV SMECO feed via OI-27B and Electrical Maintenance.

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Loss of 14 4KV Bus until picked up by 1B DG.

2.0.B **Unit 1:**

a. **IMPLEMENT** AOP-7I for loss of 14 4KV Bus. Unit may stay online.

b. **REALIGN** 14 4KV Bus to its alternate feed PER OI-27C.

c. **REALIGN** 1B DG to 11 FOST **PER** OI-21D within 2 hours, if carrying 14 4KV Bus.

Attachment 25, Large Area Losses (Continued)

O. P-13000-1 TRANSFORMER AND U1 METAL CLAD

NOTE

The following areas may have been damaged along with P-13000-1 Transformer and U1 Metal Clad:

- 11 Fuel Oil Storage Tank
- 11 RWT

1.0.A **Unit 1 Assumptions:**

a. RPS trip on partial Loss of Offsite Power (P-13000-1), otherwise a shutdown or manual trip will be initiated.

b. 14 4KV Bus remains energized. 11 4KV Bus is powered from 1A DG.

c. Without 11 RWT, boration and makeup water is from 11/12 BAST and 11 DI Storage Tank.

d. Power lost to various support buildings.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 11 RWT **AND** 21 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 11, 12, and 13 4KV Busses to alternate feeds PER OI-27C.

e. **REALIGN** 1B DG to 21 FOST **PER** OI-21D.

O. P-13000-1 TRANSFORMER AND U1 METAL CLAD (Continued)

f. **RESTORE** station power to support buildings via the 69KV SMECO.

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 2 Assumptions:**

a. Loss of 21 4KV Bus until picked up by 2A DG.

2.0.B **Unit 2:**

a **IMPLEMENT** AOP-7I for loss of 21 4KV Bus. Unit may stay online.

b. **REALIGN** 21 4KV Bus to its alternate feed PER OI-27C.

c. **REALIGN** 2A DG to 21 FOST **PER** OI-21D within 2 hours, if carrying 21 4KV Bus.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

P. U-22000-22 TRANSFORMER

NOTE

The following areas may have been damaged along with U-22000-22 Transformer:

- U-22000-21 Transformer
- U-4000-12 and 22

1.0.A **Unit 2 Assumptions:**

a. RPS trip on Loss of Load.

b. U-4000-12 and 22 are lost.

c. 21 and 24 4KV Buses deenergized until picked up by 2A and 2B DGs.

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **REFER** to AOP-7I.

c. **COOLDOWN** to Mode 5.

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Unit 1 remains online.

2.0.B **Unit 1:**

a. **IMPLEMENT** AOP-7 for bus losses, as necessary.

Attachment 25, Large Area Losses (Continued)

P. U-22000-22 TRANSFORMER (Continued)

b. **IF** unit trips,
THEN IMPLEMENT EOPs.

Q. U-25000-11 TRANSFORMER

NOTE

The following areas may have been damaged along with U-25000-11 Transformer:

- U-25000-12 Transformer
- U-4000-11 and 21

1.0.A **Unit 1 Assumptions:**

a. RPS trip on Loss of Load.

b. U-4000-11 and 21 are lost.

c. 11 and 14 4KV Buses deenergized until picked up by 1A and 1B DGs.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **REFER** to AOP-7I.

c. **COOLDOWN** to Mode 5.

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

Q. U-25000-11 TRANSFORMER (Continued)

1.0.B **Unit 2 Assumptions:**

a. Unit 2 remains online.

R. 11 RWT

NOTE

The following areas may have been damaged along with 11 RWT:

- P-13000-1 Transformer
- U1 Metal Clad
- U1 Containment
- 11 Fuel Oil Storage Tank
- 2A DG

1.0.A **Unit 1 Assumptions:**

a. RPS trip on Loss of Offsite Power (P-13000-1), otherwise a shutdown or manual trip will be initiated.

b. 11 4KV Bus is powered from the 1A DG. 14 4KV Bus remains energized.

c. Without 11 RWT, boration and makeup water is from 11/12 BAST and 11 DI Storage Tank.

d. Power lost to various support buildings.

e. CNMNT is not penetrated.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

Attachment 25, Large Area Losses (Continued)

R. 11 RWT (CONTINUED)

c. **IF** RWT makeup is required, **THEN TIE** 11 RWT **AND** 21 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 11, 12, and 13 4KV Busses to alternate feeds **PER** OI-27C.

e. **REALIGN** 1B DG to 21 FOST **PER** OI-21D within 2 hours, if carrying 14 4KV Bus.

f. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

g. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 2 Assumptions:**

a. Loss of 21 4KV Bus.

2.0.B **Unit 2:**

a. **IMPLEMENT** AOP-7I for loss of 21 4KV Bus. Unit may stay online.

b. **REALIGN** 21 4KV Bus to its alternate feed PER OI-27C.

c. **IF** 2A DG becomes available, **THEN REALIGN** to 21 FOST **PER** OI-21D.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

S. 1A AND 0C DIESEL GENERATOR BUILDINGS

1.0 **Unit 1 Assumptions:**

a. Both buildings are affected.

b. Loss of 1A DG to 11 4KV Bus.

c. Loss of 0C DG.

S. 1A AND 0C DIESEL GENERATOR BUILDINGS (CONTINUED)

2.0 **Unit 1:**

a. No EOP will be needed contingent upon no other casualties.

b. **SHUTDOWN/COOLDOWN PER** OPs (72 hour Tech Spec for 1 DG).

c. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

e. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

T. 11 FUEL OIL STORAGE TANK

NOTE

The following areas may have been damaged along with 11 Fuel Oil Storage Tank:

- 11 RWT
- P-13000-1 Transformer
- U1 Metal Clad
- U1 Containment

1.0.A **Unit 1 Assumptions:**

a. RPS trip on partial Loss of Offsite Power (P-13000-1), otherwise a shutdown or manual trip is initiated.

Attachment 25, Large Area Losses (Continued)

T. 11 FUEL OIL STORAGE TANK (Continued)

b. 14 4KV Bus remains energized. 11 4KV Bus is powered from 1A DG.

c. Without 11 RWT, boration and makeup water is from 11/12 BAST and 11 DI Storage Tank.

d. Power lost to various support buildings.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 11 RWT **AND** 21 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 11, 12, and 13 4KV Busses to alternate feeds **PER** OI-27C.

e. **RESTORE** station power to support buildings via the 69KV SMECO feed via OI-27B and Electrical Maintenance.

f. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

g. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

h. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

T. 11 FUEL OIL STORAGE TANK (Continued)

1.0.B **Unit 2 Assumptions:**

a. Loss of 21 4KV Bus until picked up by 2A DG.

2.0.B **Unit 2 Assumptions:**

a. **IMPLEMENT** AOP-7I for loss of 21 4KV Bus. Unit likely stays online.

b. **REALIGN** 21 4KV Bus to its alternate feed PER OI-27C.

c. **REALIGN** 2A DG to 21 FOST **PER** OI-21D within 2 hours, if carrying the 21 4KV Bus.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

U. TANK FARM

NOTE

The following areas may have been damaged along with Tank Farm:

- Hydrogen Storage Tanks
- U-25000-11 Transformer

1.0.A **Unit 1 Assumptions:**

a. U-25000-12, U-4000-11 and U-4000-21 are not affected.

b. RPS trip on a Loss of Load.

1.0.B **Unit 2 Assumptions:**

a. Unit 2 remains on line.

1.0.C **Both Units Assumptions:**

a. Loss of 11,12, and 21 CST.

Attachment 25, Large Area Losses (Continued)

U. TANK FARM (Continued)

b. Loss of 11 and 12 PTWST, reducing firefighting capabilities.

c. Loss of Electric and Diesel Fire Pumps. Outside fire system is used via cross connect.

d. Fire Truck(s) will be used to supplement available firefighting equipment.

e. Loss of 11 DI Storage Tank.

f. Large outside fire.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **IF** adequate condensate inventory exists,
THEN PERFORM a controlled shutdown/cooldown.

b.1 **IF** adequate condensate inventory does not exist,
THEN MAINTAIN Mode 3 (similar to EOP-7) until a makeup source can be aligned.

c. **SECURE** Blowdown system **PER** OI-8A to conserve inventory (consider shutting MSIVs).

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **TIE** outside Protected Area fire system to Protected Area fire system **PER** ERPIP-611, Attachment 1.

f. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

g. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

V. AUXILIARY BUILDING ROOF

2.0.B **Unit 2:**

a. **IF** adequate condensate inventory exists,
THEN PERFORM a controlled shutdown/cooldown **PER** the OPs.

a.1 **IF** adequate condensate inventory does not exist,
THEN MAINTAIN Mode 3 (similar to EOP-7) until a makeup source can be aligned.

b. **SECURE** Blowdown system **PER** OI-8A to conserve inventory (consider shutting MSIVs).

c. **TIE** outside Protected Area fire system to Protected Area fire system PER ERPIP-611, Attachment 1.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

NOTE

The following areas may have been damaged along with Auxiliary Building:

- U1 Containment
- U2 Containment
- U1 Turbine Building
- U2 Turbine Building

1.0 **Assumptions**

a. Loss of 0C DG.

b. Loss of SWGR HVAC.

c Loss of SR CR HVAC.

d. Loss of ADVs.

e. Loss of steam driven AFW exhaust.

V. AUXILIARY BUILDING ROOF (Continued)

f. Loss of SG safety relief valves.

g. 1B DG.

h. 2A DG.

i. 2B DG.

j. 1A DG bus ducts are assumed to survive.

2.0 **CONTINUE** the following actions:

a. **IF** there is no loss of offsite power, **THEN PERFORM** a controlled shutdown/cooldown **PER** the OIs.

b. **IF** switchgear ventilation is lost, **THEN IMPLPLEMENT** OI-22H.

c. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

d. **REFER** to SAM ERPIP-611, Attachment 1 and 2, for alternate lineups, as necessary.

e. **REFER** to SAM ERPIP-613 for mitigating strategies for severe fire, as necessary.

Attachment 26, Large Steam Leak

Implementation: Time: _____ Date: _____

Diverse Indications assisting diagnosis for large steam leaks

- Control board indications of unexpected Tcold lowering, unexpected loss of MW's, Tavg/Tref Alarm, High Power trip reset demand alarm, Abnormal steam generator pressure or level
- Fire alarms at 1C24B
- Loud noise in plant
- Unexpected steam plume sighted, unexpected humidity, or condensation build-up
- Multiple Control Room alarms/ indications may occur erroneously due to grounds

1.0 **TAKE IMMEDIATE ACTIONS** based on the following:

1.1. **IF** leak requires rapid isolation by shutting MSIV's to preserve personnel, or equipment safety,
THEN:

1.1.1. **TRIP** reactor.

1.1.2. **VERIFY** reactor is tripped,
THEN SHUT the MSIV's.

1.1.3. IMPLEMENT EOP-0.

1.2. **FOR** steam leaks large enough to have a significant effect on Reactor Coolant System:

1.2.1. **IF** unit is in Mode 1 or 2,
THEN IMPLEMENT AOP-7K (for steam line leak) or AOP-3G (for condensate/feed line leak) in parallel with this attachment.

NOTE

Procedure deviations may be needed to accommodate initial conditions.

1.2.2. **IF** unit is in Mode 3 or 4
AND steam leak is significant enough to cause ESFAS actuations,
THEN IMPLEMENT applicable portions of EOP-4 or EOP-8 in parallel with this attachment.

Attachment 26, Large Steam Leak (Continued)

1.2 (Continued)

1.2.3. **IF** steam leak presents imminent danger to personnel, **THEN**:

1. **DETERMINE** affected area:

___ U-1 / U-2 Turbine Bldg ___ U-1 / U-2 Aux Bldg
___ U-1 / U-2 Aux Bldg Roof ___ North Service Bldg Roof
___ Portion of Aux Bldg / Turb Bldg ___U-1 / U-2 Containment (use Attach 23)

2. **DETERMINE** egress route:

___ Normal egress routes ___ U-1 / U-2 TB East Stairwell
___ U-1/ U-2 TB West Stairwells ___ TB Central Stairwell (East or West)
___ Other: _____

NOTE

Noise from steam leak may interfere with station announcements. Alternate notifications to evacuate personnel, such as use of watchstanders to ensure area is cleared, should be considered.

3. **NOTIFY** station personnel.

a. **SOUND** Emergency Alarm for 5 seconds.

b. **ANNOUNCE** "A Steam Leak exists, all personnel evacuate (the affected area) immediately. (Give egress route). Shut all doors to (the affected area). Evacuated personnel assemble at SSB Cafeteria for accountability."

c. **REPEAT** once.

2.0 **REVIEW** EALs based on plant conditions.

2.1. **IF** an EAL is satisfied,
THEN, IN PARALLEL, IMPLEMENT appropriate attachment based on event classification.

Attachment 26, Large Steam Leak (Continued)

3.0 **TAKE ACTIONS** to protect personnel /equipment from effect of steam leak.

CAUTION

- If steam leak is isolable, then isolation should be done as soon as possible to lessen potential for catastrophic failure.
- Consideration of personnel safety when investigating and isolating steam leaks is paramount. Necessary precautions to ensure personnel are protected from steam burns (internal and external) shall be taken. Use of steam suits shall be considered.

3.1. **IF** leak source is determined and can be isolated in present plant conditions,
THEN ISOLATE steam leak as soon as possible.

3.2. **IF** leak source is determined,
BUT present plant conditions preclude immediate isolation (or the leak is unisolable),
THEN:

3.2.1. **PROMPTLY ESTABLISH** appropriate plant conditions to address leak using necessary operating procedures,

OR

3.2.2. **COMPLETE** an Operational Decision document justifying continued operation until steam leak can be isolated.

1. Inputs to Operational Decision include:

- How rapidly are characteristics of leak changing?
- Would a turbine trip potentially cause a rapid degradation of leak?
- Could steam leak become a vacuum leak after turbine shutdown?
- Is leak through a mechanical joint, a weld, or through wall?
- Is leak location stable or possible to lead to a rupture (wall thinning)?
- Does extent of condition need to be considered?

Attachment 26, Large Steam Leak (Continued)

3.2 (Continued)

3.2.3. **IF** leak source is not obvious,
THEN BEGIN investigation immediately to determine source of leak.

1. **ENSURE** input from Materials Engineering, System Engineering, and Design Engineering is solicited.

2. **DEVELOP** a systematic approach using plant data **AND** on scene search methods to narrow potential leakage locations.

3.3. **ESTABLISH** barriers/hazard flagging to ensure personnel stay clear of affected area.

3.3.1. **CONSIDER** potential for rapid failure at leak station when establishing protective boundaries.

3.4. **ENSURE** watertight doors are shut to protect threatened AFW pump or SRW pump rooms.

4.0 **PERFORM** personnel accountability.

4.1. **IF** an evacuation of an area was performed,
THEN PERFORM accountability of affected personnel.

NOTE

The evacuated people should be assembled at SSB cafeteria.

4.1.1. **ENSURE** appropriate supervision responds to cafeteria to establish accountability for evacuated personnel.

4.1.2. **HAVE** responding supervision report results to Control Room (or other central location designated by Shift Manager). Any discrepancies in accountability need to be promptly addressed.

Attachment 26, Large Steam Leak (Continued)

5.0 **MONITOR** steam leak status.

5.1. **PROVIDE** updates to the station as appropriate on event status.

5.1.1. **CONSIDER** periodic announcements to maintain personnel clear of the affected area.

NOTE

Use of cameras is particularly effective as a means to monitor a steam leak.

5.1.2. **ESTABLISH** means to monitor steam leak until it is isolated or repaired.

6.0 **TERMINATE** event, as follows:

6.1. **WHEN** steam leak conditions have been properly addressed, **THEN ANNOUNCE** "Now secure from the steam leak. Now secure from the steam leak."

6.2. **CONDUCT** area walk downs for damage as determined appropriate by Shift Manager.

6.3. **ENSURE** barriers installed, equipment operated, areas secured, equipment staged as part of steam leak response are restored as appropriate.

Termination: Time: _____ **Date:** _____

Attachment 27, Extensive Damage Mitigation Guidelines

NOTE

- Basis **[B2345]** applies to entire attachment.
- The highest ranking Licensed Operator survivor should apply situational judgment, and work with highest ranking Nuclear Security Officer Survivor to determine and coordinate actions required in this attachment. The highest ranking Licensed Operator survivor shall assume position of Operator In Charge and may deviate from this procedure to protect safety of Plant Personnel or health/safety of the public. In the event that no Licensed Operators survive, then highest ranking Auxiliary Operator shall assume position of Operator In Charge.

A. ASSESS THE EMERGENCY

NOTE

- This attachment assumes an event beyond design basis has occurred in which plant equipment may be extensively damaged, monitoring plant conditions may not be possible, access to plant equipment may be severely restricted, and all AC and DC power required for operation of plant systems may be lost.
- This attachment is implemented **PER** 10 CFR 50.54(x).

1.0 **IF** either of the following conditions exist,
THEN GO TO Secondary Fire Brigade Locker **AND ASSUME** command of station as Operator In Charge:

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

A. ASSESS THE EMERGENCY (Continued)

- Control Room command and control functions and personnel are lost as a result of hostile actions against the Control Room or Auxiliary Building such that control of plant equipment cannot be established from Control Room or Remote Shutdown Panel.
- A General Emergency for EAL HG4.1 (an adversary has taken control of facility such that plant personnel are unable to operate equipment required to maintain safety functions acceptance criteria, Table A.6-3) exists under Security Threat **PER** Emergency Action Level Documents (EAL-TB, EAL-HOT, EAL-COLD).

2.0 **CLASSIFY** event as a General Emergency, EAL number HG4.1 **PER** Emergency Action Level Documents (EAL-TB, EAL-HOT, EAL-COLD).

B. RE-ESTABLISH COMMAND AND CONTROL

NOTE

- Phones and computers are available in Security Muster Room and Security Shift Supervisors Office.
- Radios are available in Secondary Fire Brigade Locker.
- Procedures are available in Simulator.

1.0 **EVALUATE** communications capability for directing onsite response.

B. RE-ESTABLISH COMMAND AND CONTROL (Continued)

a. Plant Page System

b. Normal Phone System

c. 800 Mhz Radio System

d. Personal Mobile Phones

e. Alpha-Numeric Pagers

f. E-mail

g. Runners to onsite locations

2.0 **DIRECT** ERO activation **AND** offsite notification.

a. **PHONE** X5222 **OR**
GO TO Security Access Control Station.

b. **TELL** Nuclear Security Officer that a General Emergency Exists.

c. **DIRECT** Nuclear Security Officer to implement EP-AA-112-100-F-51, Shift Communicator Checklist.

d. **DIRECT** Nuclear Security Officer to recall ERO to Alternative Emergency Response Facilities using any of the following:

- Emergency Response Organization Notification System (ERONS)
- Call Tree using any available phones
- Runner to offsite location

B. RE-ESTABLISH COMMAND AND CONTROL (Continued)

e. **DIRECT** Nuclear Security Officer to summon offsite assistance using any of the following:

- Dedicated Offsite Phone
- Normal Phone System
- 800 Mhz Radio System
- Personal Mobile Phones
- Alpha-Numeric Pagers
- E-mail
- Runners to offsite Locations

3.0 **IF** plant page is operable, **THEN ASSEMBLE** surviving Operators.

a. **NOTIFY** Plant Personnel by performing the following:

(1) **ANNOUNCE**: "Attention Operations Personnel. Assemble at the Nuclear Security Facility Secondary Fire Brigade Locker."

(2). **REPEAT** above notification.

3.1 **IF** plant page is not operable, **THEN ASSEMBLE** surviving Operators **AND NOTIFY** Plant Personnel **BY USING** any available means.

- Normal Phone System
- 800 Mhz Radio Systems
- Personal Mobile Phones
- Alpha-Numeric Pagers
- E-mail
- Runners to onsite locations

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

B. RE-ESTABLISH COMMAND AND CONTROL (Continued)

4.0 **ESTABLISH** command structure.

a. **ASSUME** command and control as Operator In Charge.

b. **IDENTIFY** Nuclear Security Officer In Charge.

c. **IDENTIFY** Fire Brigade Member In Charge.

d. **DIRECT** Fire Brigade Member In Charge **TO ASSUME** Incident Command.

e. **IF** plant page is operable, **THEN NOTIFY** Plant Personnel **BY PERFORMING** the following:

(1). **ANNOUNCE:** "Attention Plant Personnel.

_____

has assumed command as Operator In Charge."

(2). **REPEAT** above notification.

e.1 **IF** plant page is not operable, **THEN NOTIFY** Plant Personnel **BY USING** any available means.

- Normal Phone System
- 800 Mhz Radio System
- Personal Mobile Phones
- Alpha-Numeric Pagers
- E-mail
- Runners to onsite locations

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

C. NOTIFY PLANT PERSONNEL OF SECURITY THREAT AS APPROPRIATE TO THE SITUATION – SECURE THE STATION

NOTE

- Any plant announcement should be coordinated with Nuclear Security Officer In Charge to evaluate best response in considering personnel safety.
- This section assumes Plant Page system is in service but not Plant Emergency Alarm.

1.0 **IF** it is deemed that Plant Personnel should *remain where they are*, **THEN NOTIFY** Plant Personnel **BY PERFORMING** the following:

a. **ANNOUNCE**: "Attention all Plant Personnel. The Station is under attack. Take cover immediately."

1.1 **IF** it is deemed that Plant Personnel should *evacuate* the Protected Area, **THEN NOTIFY** Plant Personnel **BY PERFORMING** the following:

WARNING

Take into consideration the nature of the emergency in determining if people can be assembled and accounted for in normal NOF assembly area. Give directions for alternate assembly location as situation requires.

a.1 **ANNOUNCE**: "Attention all Plant Personnel, a security threat exists. Evacuate to the NOF.
Report suspicious activities or persons to Nuclear Security on extension 911."

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

C. NOTIFY PLANT PERSONNEL OF SECURITY THREAT AS APPROPRIATE TO THE SITUATION – SECURE THE STATION (Continued)

b. **REPEAT** above notification once.

b.1 **REPEAT** above notification once.

D. IMPLEMENT INITIAL OPERATIONAL ACTIONS

NOTE

- Before dispatching personnel into plant, the Operator in Charge shall evaluate if a Security Escort is required.
- Procedures are available in Operational Support Center and Simulator.

1.0 **CONSIDER** performing the following actions as time allows at discretion of Operator In Charge:

a. **ENSURE** both reactors are shutdown:

- **OPEN** reactor trip breakers.
- **OPEN** MG set output contacts.

b. **MANUALLY TRIP** both main turbines.

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

D. IMPLEMENT INITIAL OPERATIONAL ACTIONS (Continued)

NOTE

Pressure can be read at local gages. Pressure to AFW Pumps with Steam Supply Valves open is equivalent to S/G pressure.

c. **VERIFY** a turbine driven AFW Pump is running locally **PER** EOP-8, HR-1, block step alternate action D.6.c.1.(1) through D.6.c.1.(8).

d. **OPERATE** ADVs locally to maintain S/G pressure within 25 psi of current pressure by local operation of the ADVs.

NOTE

Steam Train FCVs fail open on loss of power.

e. **THROTTLE** pump discharge valve:

- 1(2)-AFW-103
- 1(2)-AFW-117

AND/OR

ADJUST pump speed locally **TO MAINTAIN** S/G level between minus170 inches and plus 30 inches:

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

D. IMPLEMENT INITIAL OPERATIONAL ACTIONS (Continued)

f. **IF** individual S/G level needs to be adjusted,
THEN THROTTLE individual S/G AFW Stop Valves located in 27' East Penetration Room.

- 11(21) S/G 1(2)-AFW-162
- 12(22) S/G 1(2)-AFW-164

g. **MAINTAIN** AFW suction supplies and **MAXIMIZE** CST inventories **PER** EOP Attachments, Attachment 8, Maintain AFW Pump Suction Supply and CST Inventory.

h. **ISOLATE** blowdown locally.

i. **MONITOR** S/G levels **PER** Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation.

2.0 **UPDATE** Technical Support Center and Operational Support Center Staff on actions taken. Include status of reactor trip, main turbine trip, AFW operation, and ADV operation.

E. EVALUATE MAJOR EQUIPMENT STATUS

1.0 **IF** event has caused large losses of equipment,
THEN EVALUATE Attachment 25, Large Area Losses, **AND REPORT** assessment to Technical Support Center when it is activated.

F. EVENT TERMINATION

WARNING

The post-event communication of threat information should be held as SAFEGUARDS until determined otherwise.

1.0 **EXIT** this attachment when directed by Technical Support Center.

2.0 **FORWARD** all records of implementation to Security as SAFEGUARDS information until event evaluation is complete.

Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation

NOTE

- Basis **[B2345]** applies to entire procedure.
- Typical location for equipment (list below) used to monitor S/G level locally is available in the NSF Secondary fire Brigade Locker (primary response kit), OTF Instrument and Electrical Labs (alternate supplies), SSB Instrument and Electrical Shops (alternate supplies), and Warehouse (6 V batteries Mech #95G79):
  - Flashlights
  - DRUCK UPS 111 Loop Calibrator
  - Leads for voltmeter (Banana plug to alligator clip)
  - Extra AA batteries
  - 1 Large Flathead Screwdriver for removing cover screws
  - 1 Small Flathead Screwdriver for barrel nut removal
- Refer to photos on pages 6 and 7 to locate position of terminals.
- The DRUCK needs to be turned off after taking a reading. Battery life could be as short as 30 minutes if the DRUCK is continuously energized.

1.0 **IF** obtaining 11 s/g level in 45' west electrical penetration room using 1lt1114c, **THEN:**

1.1. **REMOVE** left cover from penetration 1ZWE3.

1.2. **LIFT** black and white wires of cable # ZF1L114CB at Terminal 11B-1 and 11B-2.

1.3. **CONNECT** a DRUCK Loop Calibrator, as follows:

Plus (+) lead to Terminal 11B-1

Negative (-) lead to Terminal 11B-2

1.4. **CONNECT** + lead to DRUCK red plug labeled MA.

1.5. **CONNECT** – lead to DRUCK black plug labeled COM.

1.6. **TURN ON** DRUCK.

Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation (Continued)

1.7. **PRESS** Mode Button.

1.8. **SELECT** MA measure & 24v.

1.9. **PRESS** <F2> to Enter.

1.10. **READ** current.

1.11. **USE** either supplied chart **OR CONVERT** current to S/G level, as follows:

(mADC – 4) x 29.03) – 401 = inches of level

1.11.1. **IF** obtaining 12 S/G level using 1LT1124C,
THEN:

1. **REMOVE** left cover from penetration 1ZWE3.

2. **LIFT** black and white wires of cable # ZF1L124CB at Terminal 11B-4 and 11B-5.

3. **CONNECT** a DRUCK Loop Calibrator, as follows:

   Plus (+) lead to Terminal 11B-4

   Negative (-) lead to Terminal 11B-5

4. **CONNECT** + lead to DRUCK red plug labeled MA.

5. **CONNECT** – lead to DRUCK black plug labeled COM.

6. **TURN ON** DRUCK.

7. **PRESS** Mode Button.

8. **SELECT** MA measure & 24v.

9. **PRESS** <F2> to Enter.

10. **READ** current.

11. **USE** either supplied chart **OR CONVERT** current to S/G level, as follows:

    (mADC – 4) x 29.03) – 401 = inches of level

Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation (Continued)

1.11.2. **IF** obtaining 21 S/G level in 45' West Electrical Penetration Room using 2LT1114C,
THEN:

1. **REMOVE** left cover from penetration 2ZWE3.

2. **LIFT** black and white wires of cable # ZF2L114CB at Terminal 11B-1 and 11B-2.

3. **CONNECT** a DRUCK Loop Calibrator, as follows:

   Plus (+) lead to Terminal 11B-1

   Negative (-) lead to Terminal 11B-2

4. **CONNECT** + lead to DRUCK red plug labeled MA.

5. **CONNECT** – lead to DRUCK black plug labeled COM.

6. **TURN ON** DRUCK.

7. **PRESS** Mode Button.

8. **SELECT** MA measure & 24v.

9. **PRESS** <F2> to Enter.

10. **READ** current.

11. **USE** either supplied chart **OR CONVERT** current to S/G level, as follows:

    (mADC – 4) x 29.03) – 401 = inches of level

1.11.3. **IF** obtaining 22 S/G level in 45' West Electrical Penetration Room using 2LT1124C, **THEN**:

1. **REMOVE** left cover from penetration 2ZWE3.

2. **LIFT** black and white wires of cable # ZF2L124CB at Terminal 11B-4 and 11B-5.

3. **CONNECT** a 24 VDC voltage source, as follows:

   Plus (+) lead to Terminal 11B-4

   Negative (-) lead to Terminal 11B-5

Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation (Continued)

1.11.3 (Continued)

4. **CONNECT** + lead to DRUCK red plug labeled MA.

5. **CONNECT** – lead to DRUCK black plug labeled COM.

6. **TURN ON** DRUCK.

7. **PRESS** Mode Button.

8. **SELECT** mA measure & 24v.

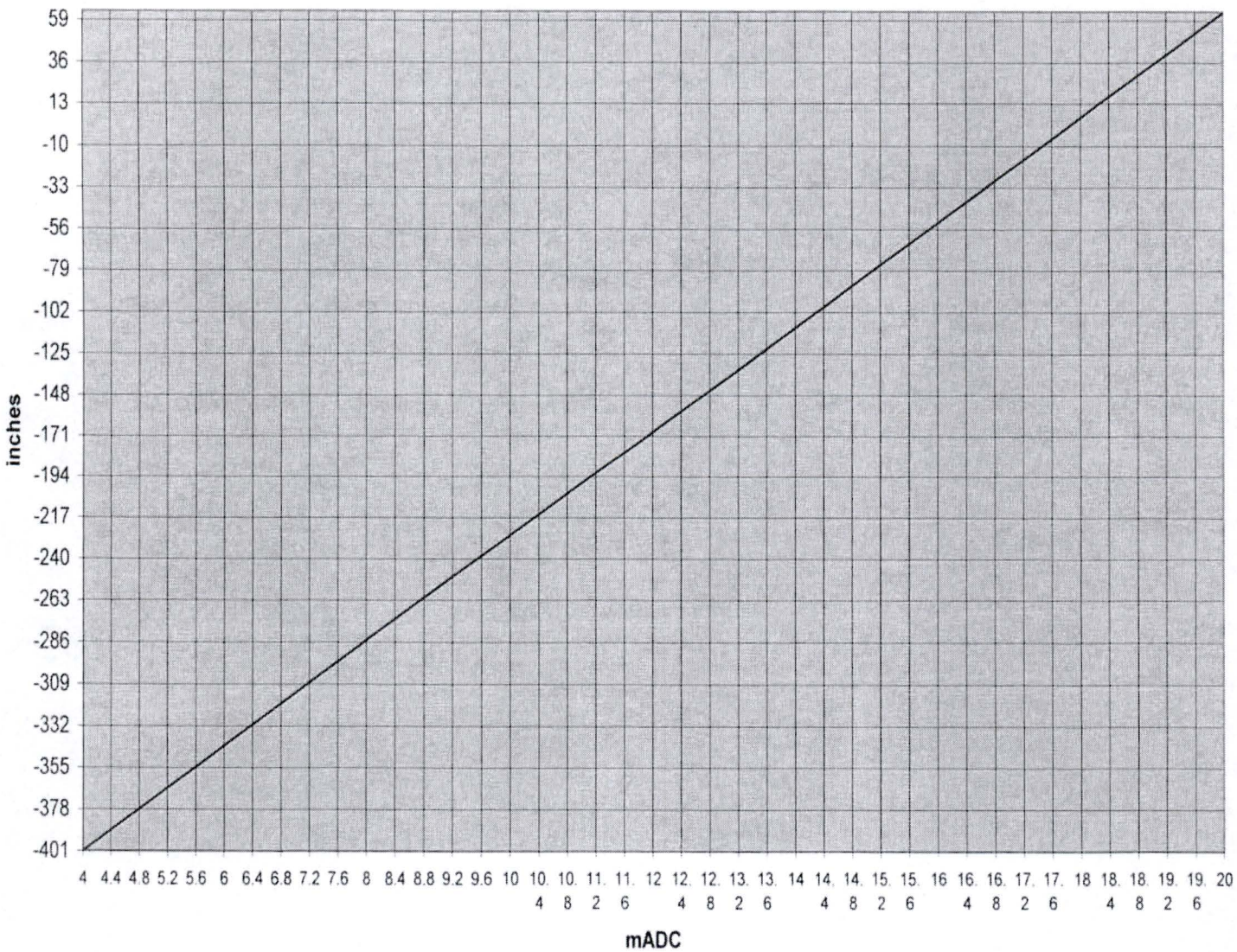
9. **PRESS** <F2> to Enter.

10. **READ** current.

11. **USE** either supplied chart **OR CONVERT** current to S/G level, as follows:

    (mADC – 4) x 29.03) – 401 = inches of level

Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation (Continued)



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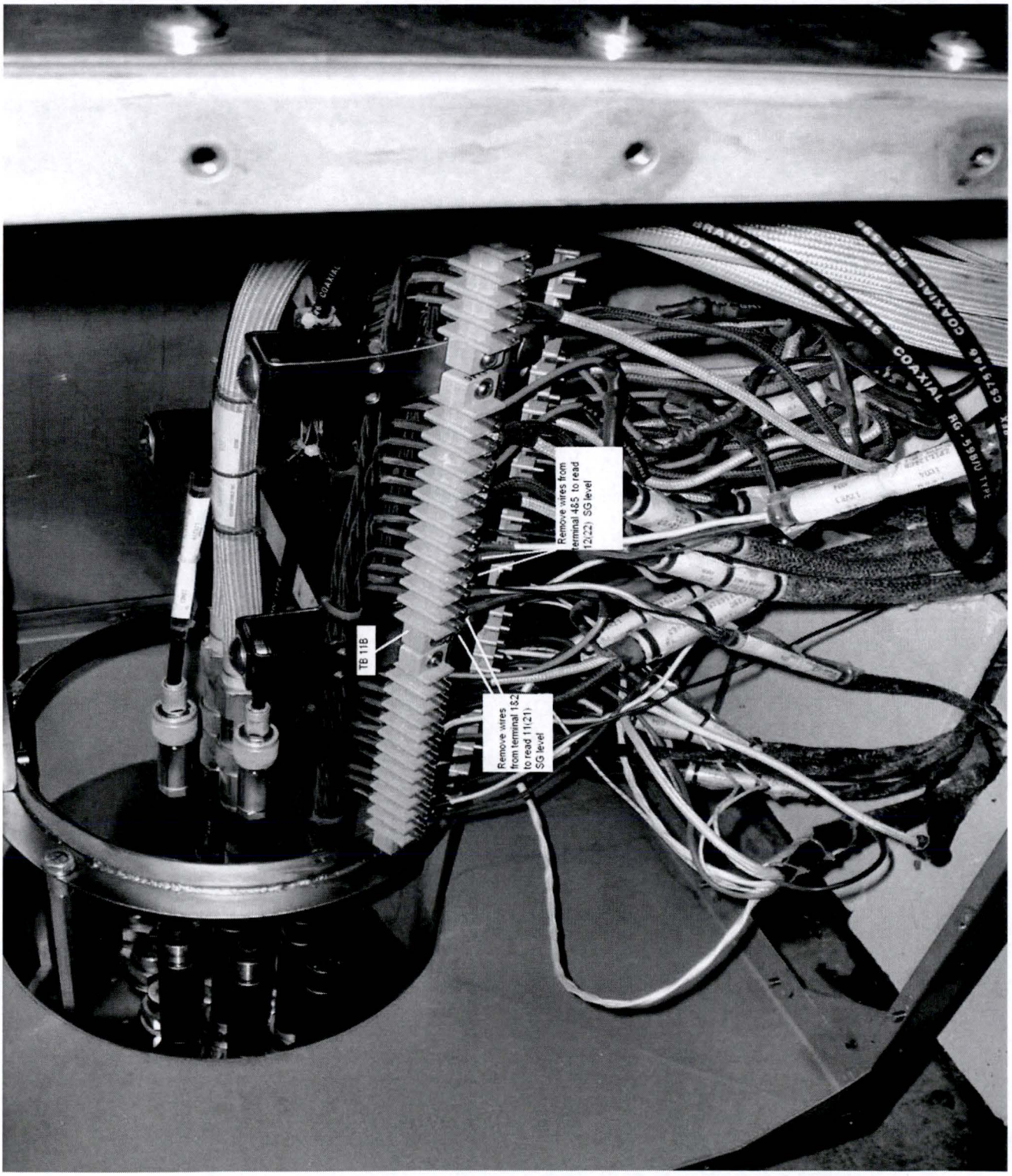
Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation (Continued)



ATTACHMENT 7

ERPIP-3.0, Revision 05901, *"Immediate Actions"*

(Redacted)

Calvert Cliffs Nuclear Power Plant
TECHNICAL PROCEDURE

ERPIP-3.0

IMMEDIATE ACTIONS

Revision 05901

This Procedure is EXEMPT from 10 CFR 50.59 / 10 CFR 72.48 Reviews

This document is associated with the implementation of the Site Emergency Plan. Revision of this document requires performance of a 10 CFR 50.54(q) in accordance with EP-AA-120-1001, 50.54(q)

~~Safety Related~~

CONTINUOUS USE

Approval Authority: Director Site Operations

SUMMARY OF ALTERATIONS

Revision	Change	Summary of Revision or Change
059	01	Attachment 15 changed contact phone numbers if medical cannot be reached

TABLE OF CONTENTS

TABLE OF CONTENTS

SECTION TITLE PAGE

1.0 PURPOSE

1.1. This procedure provides emergency response instructions for Shift Manager whenever events are in progress which could affect plant safety, personnel safety or health and safety of offsite population.

1.2. The NRC staff has issued Amendment No. 269 to Renewed Facility Operating License No. DPR-53 and Amendment No. 245 to Renewed Facility Operating License No. DPR-69 for Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2. The capability for classifying fuel damage events at Alert level threshold has been established for Calvert Cliffs Nuclear Power Plant. The capability is described in this procedure.

2.0 APPLICABILITY/SCOPE

2.1. Applicability

2.1.1. This procedure applies to the Shift Manager.

2.2. Responsibilities

2.2.1. The Shift Manager

1. Evaluates events in progress and respond using appropriate immediate actions.

2. Maintains documentation for records retention.

3. The highest ranking Licensed Operator or Auxiliary Operator to survive a hostile action against the Control Room (that leads to loss of normal command and control) will implement the requirements of this procedure PER Attachment 27, Extensive Damage Mitigation Guidelines, and Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation. **[B2345]**

3.0 REFERENCES AND DEFINITIONS

3.1. Developmental References

3.1.1. 10 CFR 20, Standard for Protection Against Radiation

3.1.2. 10 CFR 50.47, Emergency Plans

3.1.3. 10 CFR 50 Appendix E to Part 50, Emergency Planning and Preparedness for Production and Utilization Facilities

3.1 (Continued)

3.1.4. NUREG 0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

3.1.5. NRC RIS 2002-12A, Power Reactors NRC Threat Advisory and Protective Measures System, Revision 1

3.1.6. NEI-99-01, Methodology for Development of Emergency Action Levels, Revision 4

3.1.7. NEI 06-12,B.5.b Phase 2 & 3 Submittal Guideline, Revision 2

3.1.8. ESP: ES200100648, Supplement 000, Rev. 0000, Severe Weather Impact on Containment in a Defueled Condition with the Equipment Hatch Door Removed.

3.1.9. CNG-PR-1.01-1009, Procedure Use and Adherence Requirements

3.1.10. CNG-PR-1.01-1011, Control of Station-Specific Procedure Change Process

3.1.11. Calvert Cliffs Nuclear Power Plant Emergency Response Plan

3.2. **Performance References**

3.2.1. CNG-MN-4.01-1006, OnLine Schedule Management

3.2.2. CNG-NL-1.01-2004, Obtaining NRC Enforcement Discretion

3.2.3. CNG-OP-4.01-1000, Integrated Risk Management

3.2.4. AOP-3F, Loss of Offsite Power in Modes 3, 4, 5 and 6

3.2.5. AOP-7L, Circulating Water/Intake Malfunctions

3.2.6. AOP-7M, Major Grid Disturbances

3.2.7. EOP-2, Loss of Offsite Power

3.2.8. EOP-7, Site Blackout

3.2.9. EP-AA-112-100-F-51, Shift Communicator Checklist

3.2.10. EP-CHLST-MCR03, Shifts Dose Assessor Checklist

3.2.11. ERPIP-613, CHLA Large Area Loss

3.2.12. OI-4, Nitrogen Gas System

3.2 (Continued)

3.2.13. OI-21 A, B, C, Diesel Generator

3.2.14. OI-21D, Fuel Oil Storage and Supply

3.2.15. OI-22F, Control Room and Cable Spreading Rooms Ventilation

3.2.16. OI-22H, Switchgear Ventilation and Air Conditioning

3.2.17. OI-27E, SMECO Offsite Power System

3.2.18. OI-29, Saltwater System

3.2.19. OP-4, Plant Shutdown from Power Operation to Hot Standby

3.2.20. 1C24B-ALM, Fire Systems Alarm Manual

3.2.21. Emergency Telephone Directory

3.2.22. SY-AA-101-132, Security Assessment and Response to Unusual Activities

3.3. **Definitions**

3.3.1. Elevated Alert:

Warns of a credible terrorist threat against the United States and its' territories that is general in both timing and target, or details significant trends and developments in terrorism such that it is reasonable to recommend implementation of protective measures to thwart or mitigate against an attack.

3.3.2. Imminent Alert:

Warns of a credible, specific, and impending terrorist threat against the United States and its' territories that is sufficiently specific and credible to recommend implementation of protective measures to thwart or mitigate against an attack.

4.0 PREREQUISITES

4.1. Personnel Skill Levels Required

4.1.1. Personnel performing this procedure shall be qualified on tasks or activities contained in this procedure.

5.0 PRECAUTIONS

5.1.1. Declared pregnant women and minors are not authorized to perform emergency functions.

6.0 PERFORMANCE

6.1. Activation

None

6.2. Process

6.2.1. **IDENTIFY** appropriate event from listing below,
THEN GO TO indicated attachment for instructions:

- Attachment 14, SEISMIC EVENT **[B9289]**
- Attachment 15, Personnel Emergency
- Attachment 16, Fire In a Protected Area, ISFSI, or MPF
- Attachment 17, Fires that are Out
- Attachment 18, Fires Outside the Protected Area
- Attachment 19, Radiological Event
- Attachment 20, Severe Weather
- Attachment 22, Hazardous Material and Offsite Oil Spill Response
- Attachment 23, Containment Evacuation
- Attachment 24, Security **[B1159] [B1162] [B1167] [B1168] [B1200][B1833]**
- Attachment 25, Large Area Losses **[B1162] [B1168]**
- Attachment 26, Large Steam Leak
- Attachment 27, Extensive Damage Mitigation Guidelines **[B2345]**
- Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation **[B2345]**

6.3. Deactivation

6.3.1. **WHEN** notified of event termination,
THEN FORWARD records **AND** documentation generated from use of Emergency Response Plan Implementation Procedures to Emergency Preparedness.

7.0 POST PERFORMANCE ACTIVITIES

None

8.0 BASES

[B1153] SOER 99-1, Recommendation 2, for conservatively placing the plant in a safe operating or shutdown condition when significant threats (hurricane) to grid stability exists.

[B1154] Hurricane Floyd Lessons Learned.

[B1155] ES199900653, in the event of a hurricane affecting CCNPP, make corrections to short term pressure limits to Saltwater Header Pressures PER OI-29, Saltwater System.

[B1159] Incorporated changed instructions in Attachment 24, Security, in response to NRC Incident Response Center message to all nuclear power plant sites, "Safeguards Advisory for Power Reactors," dated October 6, 2001. Contents of NRC Incident Response Center message is Safeguards Information.

[B1165] IR4-002-736, (IR200200733) On November 11, 2002 ERPIP-3.0, Attachment 20 step 9 was performed for severe weather. The action performed (exiting reduced inventory) was insufficient to meet core cooling in the event of Site Blackout.

[B1166] ES200200015 Supp. No. 000, Evaluation of the potentially high SRW pump room temperature (in excess of design value) due to high temperature in the TB.

[B1167] Incorporated Airborne Threat instructions in Attachment 24, Security, in response to NRC Safeguards Advisory for Operating Power Reactors (SA-05-02), dated January 26, 2005. Contents of NRC advisory is Safeguards Information.

[B1168] NRC Letter, R. W. Borchardt for J. E. Dyer to Holders of Licenses for Operating Power Reactors as listed in enclosure 1, NRC Staff Guidance for Use in Achieving Satisfactory Compliance with February 25, 2002, Order Section B.5.b, February 25, 2005.

[B1200] NRC Letter from Mr. S. J. Collins (NRC) to Mr. C. H. Cruse (CCNPP), "Issuance of Order for Interim Safeguards and Security Compensatory Measures for - Calvert Cliffs Nuclear Power Plant Units 1 & 2," dated February 25, 2002.

[B1833] CT200600005 MS #5 and #10, Revise Fire Brigade and Plant Operator Dispersal Plan.

[B2345] NRC Letter, Catherine Haney (NRR) to J. A. Spina (CCNPP), "Calvert Cliffs Nuclear Power Plant, Units 1 & 2 – Mitigation Strategy Assessments and Closure Process for Phases 1, 2, and 3", dated October 12, 2006.

[B09631] SOER 07-02, Rec 1 Effectiveness Review under AI-2012-000022-001. Contingency plans for emergency response actions and plant operations were developed and incorporated in ERPIP-3.0, Attachment 22.

[B9289] CCNPP response to IER L2-12-12. Greater than Design Basis Earthquake results on Loss of OFF-SITE Power and Reactor Scram

[B09460] CCNPP response to IER L1-11-2, Rev 2, Recommendation 6. If dry casks are used for spent fuel storage, establish procedures to verify cask condition following severe weather, seismic events or flooding. These procedures should include visual inspections to identify cask damage that could result in a loss of containment, shielding or cooling functions. Procedures should also include area radiation surveys to identify any deviation from normal background levels and should identify response actions if abnormal conditions are found. Include use of these procedures in training for applicable personnel

9.0 RECORDS

9.1. Records generated by this procedure may be permanent, non-permanent, or lifetime radiological records depending on circumstances under which they are generated. Records shall be captured and controlled as follows:

9.1.1. During an actual event as described in the purpose statement of this procedure, records shall be considered quality records and submitted to Emergency Preparedness Unit for final disposition **PER** CNG-PR-3.01-1000, Records Management.

- Attachment 14, SEISMIC EVENT
- Attachment 15, Personnel Emergency
- Attachment 16, Fire In The Protected Area, ISFSI, or MPF
- Attachment 17, Fires that are Out
- Attachment 18, Fires Outside the Protected Area
- Attachment 19, Radiological Event
- Attachment 20, Severe Weather
- Attachment 22, Hazardous Material and Offsite Oil Spill Response
- Attachment 23, Containment Evacuation

9.1.2. During an actual event as described in purpose statement of this procedure, dosimetry records, that is, any dose-related record including access history records, are considered radiological quality records and are to be handled and maintained **PER** standard practices and unit procedures.

9.1.3. During a drill or exercise, records generated shall be considered quality records and submitted to Emergency Preparedness Unit for evaluation.

- Attachment 14, SEISMIC EVENT
- Attachment 15, Personnel Emergency
- Attachment 16, Fire In The Protected Area, ISFSI, or MPF
- Attachment 19, Radiological Event
- Attachment 22, Hazardous Material and Offsite Oil Spill Response
- Attachment 23, Containment Evacuation

Attachment 1, Deleted

EALS are located in FCMS under EAL–TB, EAL–HOT, and EAL–COLD.

Attachment 2, Deleted

Attachment 3, Deleted

Attachment 4, Deleted

Attachment 5, Deleted

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Attachment 13, Deleted

Attachment 14, SEISMIC EVENT [B9289]

Implementation: Time: _____ **Date:** _____

1.0. **EVALUATE** Seismic activity by any of the following:

1.1. **EVALUATE** implementation of the Emergency Response Plan using data from ALL Seismic Recorders obtained per OI-46, Seismic Measurement Equipment. Evaluate Emergency Action declaration per Emergency Action Level (EAL) thresholds.

1.2. **IF** the effects of the earthquake were felt by on-site personnel (See OI-46, Table 1).
THEN EVALUATE implementation of the Emergency Response Plan. Evaluate Emergency Action declaration per EAL thresholds.

1.3. **CONTACT** one of the following earthquake centers to get information on the extent of the earthquake:

- The National Earthquake Information Center (NEIC located at Golden, CO) at 303-273-8500. Select option 1 and inform the analyst you wish to confirm recent seismic activity in the vicinity of Calvert Cliffs Nuclear Power Plant. Provide analyst with the following CCNPP coordinates: 38° 25' 39.7" north latitude, 76° 26' 45" west longitude.

- The University of Delaware at 302-831-1576

NOTE

The latest USGS phone numbers from the web site are:

- 703-648-5953 USGS Headquarters (Virginia)
- 303-236-5900 Denver Federal Center (Colorado)
- 650-853-8300 Menlo Park (California)
- 573-308-3500 Rolla (Missouri)
- 907-786-7011 Alaska Science Center (Alaska)

1.4. **IF** available,
THEN REFER to the U.S. Geological Survey (USGS) web site for the latest earthquake **AND** contact information at the following address.
http://earthquake.usgs.gov

Attachment 14, SEISMIC EVENT [B9289]

2.0. **IF** peak acceleration values are greater than:

0.15g Horizontal **OR** 0.10g Vertical (Design Basis Earthquake),
THEN:

2.1. **COMMENCE** a controlled shutdown **PER** OP-3, **AND PLACE** both Units in Mode 5 as expeditiously as possible.

2.2. **DETERMINE** reportability requirements **PER** LS-AA-1400.

2.3. **COMMENCE** immediate short term walkdowns and inspections of Plant Equipment per Step 7.0.

2.4. **REQUEST** System Engineering to **PERFORM** Post Event walkdown per MN-1-319, STRUCTURE **AND** SYSTEM WALDOWNS.

3.0. **IF** peak acceleration values are within the following ranges:

GREATER than 0.08g and LESS than 0.15g Horizontal (Operating Basis Earthquake)

GREATER than 0.053g and LESS THAN 0.10g Vertical (Operating Basis Earthquake)
THEN

3.1. **DETERMINE** reportability requirements **PER** LS-AA-1400.

3.2. **COMMENCE** a controlled shutdown **PER** OP-3.

3.3. **COMMENCE** immediate short term walkdowns and inspections of Plant Equipment per Step 7.0.

3.4. **REQUEST** System Engineering to **PERFORM** Post Event walkdown per MN-1-319, STRUCTURE **AND** SYSTEM WALDOWNS.

Attachment 14, SEISMIC EVENT [B9289]

NOTE
The licensee is required to demonstrate to the NRC that NO functional damage has occurred to those features necessary for continued operation without undue risk to the health and safety of the public, **PER** 10 CFR 100.

4.0. **IF** Units require Shutdown,
THEN ENSURE prior to resuming operation, no functional damage has occurred to those features necessary for continued operation without undue risk to the health and safety of the public, PER 10 CFR 100.

5.0. **IF** peak acceleration values are less than 0.08g horizontal or 0.053g vertical (Operating Bases Earthquake), **AND** the effects of the earthquake,have been felt by on site personnel,
THEN PERFORM the following:

5.1. **DETERMINE** reportability requirements per LS-AA-1400.

5.2. **COMMENCE** immediate short term walkdowns and inspections of Plant Equipment per Step 7.0.

6.0. **IF** additional seismic events occur,
THEN REPEAT steps 1 through 7 as necessary.

Attachment 14, SEISMIC EVENT [B9289]

NOTE

- Control Room and Operations personnel should carefully monitor parameters of running equipment watching for changes due to the Earthquake.

- Walkdowns shall be performed by Plant Operators because of their familarity with pre-earthquake conditions of Plant Equipment. Other Plant Personnel, (e.g. Engineering or Maintenance) may assist with the walkdowns. Walkdowns should not be delayed by a significant period of time waiting for support personnel to become available.

- Inspect General Plant Areas for the following, and Inform the Control Room.

  a. Mechanical Components:

  (1) Damage to flooring, mountings, Snubbers, and Pipe Hangers.

  (2) Damage and Physical misalignment of Equipment.

  (3) The presence of leaks and other indication of loss of pressure boundries.

  (4) The presence of Abnormal Sounds from Operating Equipment.

  b. Electrical Equipment:

  (1) Breakers and Disconnect Switches not in their normal position.

  (2) Dropped flags on protective relays for Buses and equipment.

  (3) Physical damage to Switchgear, Transformers or other Electrical equipment

7.0. **FOLLOWING** a Seismic Event **PERFORM** detailed walkdowns of Plant areas AND equipment:

7.1. Intake Structure with particular attention to Salt Water Pumps and SW system piping

Attachment 14, SEISMIC EVENT [B9289]

7.2. Outside Structures

- 11 and 21 RWT
- 11,12,and 21 CST, especially signs of ground subsidence indicating damage to underground piping
- AFW Valve Stand
- 11 and 21 FOST especially signs of damage to fuel lines to the DGs
- 11 and 12 PTWST

7.3. 1A and 0C DG Buildings, including Switchgears and support systems required for operation

7.4. 1B, 2A, and 2B EDGs, including support systems required for operation

7.5. 13 KV Metal Clad Switchgears

7.6. Service Transformers P13000-1, P13000-2

7.7. 500 KV Switchyard

7.8. Independent Spent Fuel Storage Installation (ISFSI) **[B09460]**

- Have Security perform a preliminary visual inspection of the ISFSI area for signs of shifting, damage or degradation to the horizontal storage modules (HSM). Ensure Security reports any signs of shifting, damage or degradation
- Notify RP to perform radiation surveys as appropriate, if damage or degradation is suspected or reported. Ensure RP reports any deviation from normal background radiation levels

7.9. FLEX Equipment Storage Buildings

- FLEX Storage Robust Building (FSRB)
- FLEX Storage Commercial Building (FSCB)

7.10. 45' Switchgear Rooms

Attachment 14, SEISMIC EVENT [B9289]

7.11. 27' Switchgear Rooms

7.12. SRW Pump Rooms SRW Pumps and Heat Exchangers as well as 13(23) AFP

7.13. 69' Aux Building

- SRW Head Tanks
- CC Head Tanks
- Spent Fuel Pool
- Electrical Pen Rooms (MCC-114R/214R)

7.14. 45' Aux Building

- ADVs
- Electrical Pen Rooms (MCC-104R/204R)

7.15. 27' Aux Building

- Spent Fuel Pool Cooling Pumps and Heat Exchangers
- 27' West Pen Rm checking for leaks (use Camera if available)

7.16. 5' Aux Building

- Service Water Supply and Returns Headers
- Component Cooling Rooms CC Pumps and Heat Exchangers
- BAST Rooms

7.17. -10' Aux Building

- Charging Pumps and Piping

Attachment 14, SEISMIC EVENT [B9289]

7.18. -15' Aux Building

- ECCS Pump Rooms, Pumps, Heat Exchangers, and ECCS Piping

7.19. All levels of Turbine Building

7.20. Water Treatment Areas

8.0. **IF** a Seismic Event OBE level or greater has occurred, **THEN PERFORM** the following:

8.1. **FOR** all SAFETY-RELATED BREAKERS that are **NOT** in the connected position, with Shift Manager concurrence, **INFORM** E&C TO:

1. **INSPECT** for loose hardware and deformation of the drawout element and cell

2. **RACK** the breaker into the **TEST** position **AND VERIFY** several successful close-open operations.

3. **RETURN** the breaker to the **AS FOUND** position

9.0. **SUBMIT** an Issue Report for any discrepancies.

Termination: Time: _____ **Date:** _____

Attachment 15, Personnel Emergency

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Caller's Name: _____

Location of injured person: _____

Nature of injury: _____

Phone number to call to reach the scene: _____

NOTE

If based on the report the injury is minor in nature (small cut with little bleeding, small contusion or minor sprain with person able to easily walk), then sounding the Emergency Alarm is unwarranted.

2.0 **IF** initial assessment by the Control Room is that sounding the Emergency Alarm is unwarranted,
THEN CONTACT Fire and Safety Watch (FASW) (and RPT, if injured person is in Radiologically Controlled Area (RCA)).

2.1. **DIRECT** response to personnel emergency.

2.2. **NOTIFY** Site Medical to perform medical assessment (495-4022).

2.2.1. **IF** Site Medical is **NOT** available
THEN CALL Site Nurse cell (301-404-7838).

2.2.2. **IF** unable to contact Site Nurse from cell phone
THEN CONTACT OHS supervisor (717-824-0732).

2.3. **COMPLETE** Termination Time and Date.

2.4. **NOTIFY** Site Safety of the incident (495-5215).

2.5. **EXIT** this procedure.

Attachment 15, Personnel Emergency (Continued)

3.0 **ALERT** Response Personnel.

3.1. **SOUND** Emergency Alarm for 5 seconds.

3.2. **ANNOUNCE:** "A personnel emergency exists." (Give location and nature of injury.) "First Aid Team respond."

3.3. **IF** injured person is in RCA,
THEN ALSO ANNOUNCE: "Radiation Protection Technician Respond."

3.4. **REPEAT** once.

4.0 **CONFIRM AND MONITOR** response.

4.1. **CONFIRM** First Aid Team response by contacting FASW via radio.

4.2. **SELECT** Channel 1D as primary channel on CRS console. (FASW is on this channel.)

4.3. **HAVE** CRO radio remain on Channel 1H with volume turned up.

5.0 **MAKE** Site notifications.

5.1. **NOTIFY** Site Medical to perform medical assessment (495-4022).

5.1.1. **IF** Site Medical is **NOT** available
THEN CALL Oyster Creek Medical for assistance (609-971-4182).

5.2. **NOTIFY** Site Safety of the incident (495-5215).

6.0 **DETERMINE** contamination and hospitalization status.

6.1. **IF** injured person is suspected to be contaminated,
THEN HAVE an RPT determine **AND** report person's contamination status.

6.1.1. **IF** unknown whether injured person is contaminated or not,
THEN TREAT as contaminated.

Attachment 15, Personnel Emergency (Continued)

NOTE

First Aid Team Leader can directly communicate with offsite responding units on Radio Channel 1E.

6.2. **IF** hospitalization is required,
THEN NOTIFY CAS/SAS (495-4695) for offsite assistance.

6.3. **IF** a contaminated injured person requires hospitalization,
THEN ALERT Calvert Memorial Hospital Emergency Room by calling 410-535-8344, 410-535-8345, or Hospital Switchboard 410-535-4000.

6.3.1. **TALK** to a nurse or doctor
AND REPORT the following information:

Number of injured people ____ Number of contaminated ____

Nature of injuries:_____

Estimated time of arrival: _____

6.3.2. **REVIEW** Regulatory Reporting requirements. (50.72(b)(3)(xii))

7.0 **CONTINUE** to monitor event
AND DIRECT assistance to scene as requested by First Aid Team Leader.

7.1. **PROVIDE** updates to management as warranted.

8.0 **WHEN** notified by First Aid Team Leader that event may be terminated,
THEN ANNOUNCE a brief update on status of personnel emergency.

8.1. For example,

"Person is being escorted to medical, person being transported to hospital".

AND

"Now secure from Personnel Emergency. Now secure from Personnel Emergency."

Termination: Time: _____ **Date:** _____

Attachment 16, Fire In The Protected Area, ISFSI, Or MPF

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Caller's Name: _____ Number to reach: _____

Location of Fire: _____

Type of Fire: _____

*Time Report of Fire is Received: _____

*Time of Fire Control Panel Alarm: _____

*DID AN EXPLOSION OCCUR? YES NO

1.1. **ENSURE** Shift Manager has above asterisked information as soon as possible for EAL determination.

1.1.1. The earliest time recorded above is used for 15 minute EAL threshold for fires within Protected Area.

2.0 **ACTIVATE** response personnel.

2.1. **SOUND** Emergency Alarm for 5 seconds.

2.2. **ANNOUNCE**: "There is a fire (Give location and nature of fire). Fire Brigade (and Radiation Protection Technician)[if fire is in a RCA] respond."

2.3. **REPEAT** once.

2.4. **IF** a fire **OR** explosion has disturbed any insulation,
THEN CONSIDER contacting Industrial Hygienist **AND** Asbestos Project Designer in Mechanical Planning Department.

3.0 **CONFIRM AND MONITOR** response.

3.1. **CONFIRM** Fire Brigade response by contacting Fire Brigade Leader (FBL) via radio or plant page.

3.2. **SELECT** Channel 1D as primary channel on CRS console. (FBL and Interior Command are on this channel.)

3.3. **HAVE** CRO radio remain on Channel 1H with volume turned up.

3.3.1. **HAVE** Operations Technical Assistant (OTA) select 1H to monitor for operational concerns.

3.4. **CONSIDER** the following:

- Securing ventilation and electrical power impacting scene.
- Evacuation, restricting access, or isolation of certain areas to maintain personnel safety.
- Securing or venting flammable sources impacting scene (for example, Hydrogen, Oil).

4.0 **DETERMINE** status of Fire Brigade response.

4.1. **RECORD** time Fire Brigade is fully staffed: _____

4.2. **CONTACT** CAS/SAS (495-4695) for assistance to transport fire brigade and equipment if fire is at ISFSI.

4.3. **RECORD** time Extinguishing Agent is applied to fire,

By Fire Brigade: _____ By automatic suppression system: _____

NOTE

FASW can directly communicate with offsite responding units on Radio Channel 1E.

4.3.1. **CALL** for Offsite Assistance by contacting CAS/SAS (495-4695) if fire involves any of the following:

Hydrogen, Turbine Lube Oil, Hydrogen Seal Oil, 4Kv or higher Transformer, or the FBL requests Offsite Assistance (Ask the FBL if necessary).

Time of call for Offsite Assistance: _____

5.0 **REVIEW** Emergency Action Levels

5.1. **REVIEW** EALs based on fire/explosion event considering duration, impact on plant equipment, and location.

5.2. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel the appropriate attachment based on event classification.

6.0 **CONTINUE** to monitor event **AND** direct assistance to scene.

6.1. **REVIEW** the following for fire strategy information on fire location, potential fire affects, **AND** for mitigating and compensatory measures that do not need to be involved:

- Fire Strategies Manual
- Plant Area Fire Strategy Templates
- AOP-9 Series
- Attachment titled Interactive Cable Analysis

6.2. **IMPLEMENT** actions **PER** the above procedures, Fire Brigade Leader, and OTA.

6.3. **CONSIDER** securing ventilation and electrical power impacting scene.

6.4. **CONSIDER** evacuation, restricting access, or isolation of certain areas to maintain personnel safety.

6.5. **CONSIDER** strategies for protecting adjacent equipment, especially Safety Related and Safe Shutdown equipment.

6.6. **CONSIDER** implementing a unit shutdown, rapid shutdown, or manual trip should fire threaten ability to safely stay on line or severely challenges nuclear safety margin.

6.7. **IF** turbine ventilation is completely secured,
THEN RESTORE it as soon as possible **AND** within 10 hours at latest to avoid exceeding design temperatures for SRW pp rms. **[B1166]**

7.0 **UPDATE** station on event progress via announcements, as appropriate.

8.0 **EVALUATE** if large area loss has occurred.

8.1. **IF** fire has caused large losses of equipment
OR an inability to access significant areas of plant,
THEN EVALUATE attachment for Large Area Losses **AND** ERPIP-613, CHLA Large Area Loss, to develop recovery and mitigation strategies.
[B1162][B1168]

WARNING

Restoring power to damaged electrical equipment without proper administrative controls can cause additional fires, unexpected equipment actuations, equipment damage, or electrocution risks.

8.2. **IF** the fire has damaged electrical equipment or cables, **THEN IDENTIFY** affected circuitry, AND **ESTABLISH** formal administrative controls (ex., clearance/danger tagouts) to prevent inadvertent injection of energy into damaged circuitry, until repairs can be made.

9.0 **TERMINATE** event, as follows:

9.1. **WHEN** reported from scene that fire is out,
THEN:

9.1.1. **RECORD**: Time_____ **AND**
ANNOUNCE to the station that fire is now out.

9.2. **WHEN** notified by Fire Brigade Leader that event may be terminated,
THEN ANNOUNCE, "Now secure from the Fire. Now secure from the Fire."

9.3. **ENSURE** equipment **AND** areas secured as part of fire response are restored as appropriate.

9.4. **REVIEW** Regulatory Reporting **AND** PCB Management procedures for any necessary reports.

9.5. **ENSURE** NFM is aware of any fire affecting ISFSI.

9.6. **IF** fire occurred in Aux Building or Containment,
THEN ENSURE a CR is written to have fire assessed for actions to be taken **PER** Tech Spec 5.5.11, Ventilation Filter Testing Program.

Termination: Time: _____ **Date:** _____

Attachment 17, Fires That Are Out

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Caller's Name: _____ Number to reach: _____

Location of Fire: _____

Type of Fire: _____

2.0 **ACTIVATE** response personnel.

2.1. **PROVIDE** pertinent information **AND**
DIRECT Fire and Safety Watch to assess fire and advise.

2.2. **PROVIDE** pertinent information **AND**
DIRECT RPT to assess the potential for airborne radioactivity based on fire location **AND** what was burning.

2.3. **PROVIDE** pertinent information to Security so that they can assess any security issue (tampering, sabotage) based on the evidence.

3.0 **ACT** on advice from FASW, RPT, and Security.

3.1. **DOCUMENT** actions taken:

_____
_____
_____
_____
_____

3.2. **IF** fire involved PCB's,
THEN REVIEW PCB Management procedure for reporting requirements.

4.0 **SECURE** from event.

Termination: Time: _____ **Date:** _____

Attachment 18, Fires Outside The Protected Area

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Caller's Name: _____ Number to reach: _____

Location of Fire: _____

Type of Fire: _____

2.0 **IF** fire is in ISFSI OR MPF,
THEN STOP using this attachment **AND PROCEED** to attachment for fires in protected area, ISFSI, or MPF.

3.0 **ACTIVATE** response personnel.

3.1. **IF** fire is located in Owner Controlled Area,
THEN:

3.1.1. **NOTIFY** Fire Marshall (or alternate).

3.1.2. **CALL** for offsite assistance by contacting SAS/CAS (495-4695) **OR** calling directly (Radio channel 1E).

3.1.3. **DISPATCH** Fire Brigade Leader to act as station liaison with offsite assistance.

3.1.4. **MAKE** station announcement, as appropriate, to notify station personnel.

3.2. **IF** fire is in office building or warehouse complex
AND operational conditions allow Fire Brigade to respond outside Protected Area,
THEN:

NOTE

The OTA does not need to respond.

3.2.1. **SOUND** Emergency Alarm for 5 seconds.

3.2.2. **ANNOUNCE** "There is a fire." (Give location and nature of fire.) "Fire Brigade respond."

3.2.3. **REPEAT** once.

Attachment 18, Fires Outside The Protected Area (Continued)

3.3. **IF** operational conditions prohibit Fire Brigade response,
THEN:

3.3.1. **CALL** for Offsite Assistance by contacting CAS/SAS (495-4695) OR calling directly (Radio channel 1E).

3.3.2. **MAKE** station announcement as appropriate to notify station personnel.

4.0 **CONFIRM AND MONITOR** response.

4.1. **IF** Fire Brigade was dispatched,
THEN:

4.1.1. **CONFIRM** Fire Brigade response by contacting Fire Brigade Leader (FBL) via radio or plant page.

4.1.2. **SELECT** Channel 1D as primary channel on the CRS console. (FBL and Interior Command are on this channel.)

4.1.3. **HAVE** CRO radio remain on Channel 1H with volume turned up.

4.2. **IF** Offsite Assistance was requested,
THEN:

4.2.1. **CONFIRM** their response with security.

4.2.2. **MONITOR** radio traffic for current activity. (Emergency Telephone Directory provides details on audio operation.)

5.0 **CONTINUE** to monitor event **AND** direct assistance to scene as requested by on-scene personnel.

5.1. **CONSIDER** the following:

- Securing ventilation and electrical power impacting scene.
- Evacuation, restricting access, or isolation of certain areas to maintain personnel safety.
- strategies for protecting adjacent equipment.

6.0 **UPDATE** station on event progress via announcements, as appropriate.

Attachment 18, Fires Outside The Protected Area (Continued)

7.0 **TERMINATE** event, as follows:

7.1. **WHEN** reported from scene that fire is out,
THEN RECORD: Time_____

7.2. **WHEN** notified by on-scene personnel that event may be terminated
AND previous announcements have been made,
THEN ANNOUNCE: "Now secure from the Fire. Now secure from the Fire."

7.3. **ENSURE** equipment **AND** areas secured as part of fire response are restored as appropriate.

7.4. **REVIEW** Regulatory Reporting **AND** PCB Management procedures for any necessary reports.

Termination: Time: _____ **Date:** _____

Attachment 19, Radiological Event

Implementation: Time: _____ Date: _____

Guidance for Determination of Radiological Event occurrence

- Unplanned radiation field greater than 100 mr/hr.
- Radiation field greater than 100 mr/hr on contact with HSM access door.
- Unplanned airborne radioactivity greater than 1E-9 microCi/cm3.
- Unplanned liquid or gaseous release of material.
- Unplanned event requiring evacuation of personnel due to radiological conditions.
- Unplanned loose surface contamination outside RCA greater than 10000 dpm/100 cm2 Beta-Gamma or 1000 dpm/100 cm2 Alpha.
- Unplanned radiation monitor alarms that indicates a significant deviation from normal conditions.

1.0 RECORD THE FOLLOWING INFORMATION:

Type of Radiological Issue: (circle above or describe) _____

_____

Unit, Area and Systems affected:_____

Current Radiation Monitors in Alarm: _____

Is Immediate evacuation of an area warranted? YES NO

2.0 **NOTIFY** station personnel.

2.1. **SOUND** Emergency Alarm for 5 seconds.

2.2. **ANNOUNCE**: "A Radiological Event exists." (Give location and nature of event.)

2.3. **IF** immediate evacuation of an area is necessary,
THEN ANNOUNCE "All personnel evacuate (give affected area) immediately."

2.4. **IF** appropriate to situation,
THEN PROVIDE evacuation route to minimize exposure.

2.5. **REPEAT** once.

Attachment 19, Radiological Event (Continued)

3.0 **EVALUATE, MONITOR, AND RESPOND** to abnormal conditions.

3.1. **DIRECT** RPT to assess conditions **AND** provide recommendations on:

3.1.1. Need to evacuate or control access to certain areas. (Announce **PER** Step 2 if evacuation is warranted.)

3.1.2. Methods to control activity release and minimize personnel exposures.

3.1.3. Need for additional support personnel.

3.1.4. Operator actions needed to mitigate or control situation.

3.2. **DIRECT** Chemistry Shift Technician (CST) to perform EP-CHLST-MCR03, Shifts Dose Assessor Checklist, **AND** provide reports on:

3.2.1. Status of affected radiation monitors, readings and trends.

3.2.2. Dose Projection and offsite dose consequences.

3.2.3. Protective action recommendations.

3.3. **DIRECT** Operator response based on:

3.3.1. Implementation of Alarm Response Manual actions.

3.3.2. Abnormal Operating Procedures (leak identification and isolation, inadvertent releases, spills).

3.3.3. As advised by RPT.

4.0 **MAINTAIN** Control Room habitability.

4.1. **IF** airborne radioactivity could impact habitability of Control Room, **THEN:**

4.1.1. **SECURE** Toilet Exhaust Fan.

4.1.2. **CONSIDER** placing Control Room Post LOCI filters in service.

4.1.3. **BRING OUT** SCBA's **AND** **STAGE** them for use as recommended by RPT or CST.

5.0 **CONTACT** station personnel for evaluations.

5.1. **IF** an accidental release of radioactivity is occurring as indicated by an alarm on WRNGM, Main Vent Gaseous Monitor, Containment Radiation Monitors, or Main Steam Radiation Monitors,
OR a spill to the environment,
THEN NOTIFY Radiation Protection and Operations Management immediately.

5.2. **IF** event is associated with ISFSI or a Dry Storage Canister,
THEN NOTIFY Nuclear Fuel Management immediately.

5.3. **IF** a spill to environment has occurred,
THEN REQUEST Radiation Protection Manager determine if limits of 10 CFR 20 Appendix C have been exceeded.

6.0 **REVIEW** Emergency Action Levels.

6.1. **REVIEW** EALs based on radiological conditions **AND** dose projections.

6.2. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel, the appropriate attachment based on event classification.

7.0 **CONTINUE** to monitor event **AND** direct assistance as requested by RPT or Scene Leader.

7.1. **DIRECT** spill cleanup, as appropriate.

7.2. **CONSIDER** the following:

- Placing filters in service, and realigning, or securing ventilation impacting scene.
- Evacuation, restricting access, or isolation of certain areas to limit personnel exposure.

7.3. **MONITOR** offsite dose consequences until release rates are verified to be within technical specification limits.

7.4. **UPDATE** station on event progress via announcements, as appropriate.

Attachment 19, Radiological Event (Continued)

8.0 **TERMINATE** event, as follows:

8.1. **WHEN** event no longer warrants emergency response,
THEN ANNOUNCE:

"Now secure from the Radiological Event. Now secure from the Radiological Event."

8.2. **IF** areas were evacuated or restricted,
THEN ANNOUNCE "Normal access to (affected areas) is restored," as appropriate.

8.3. **ENSURE** equipment realigned **AND** areas secured as part of event response are restored, as appropriate.

8.4. **REVIEW** Regulatory Reporting procedure for any necessary reports.

Termination: Time: _____ **Date:** _____

Attachment 20, Severe Weather

Implementation: Time: _____ **Date:** _____

NOTE

Weather information is available from WEATHERTAP.com and National Weather Service (see the Emergency Response Facility Directory).

1.0 **VERIFY** Severe Weather conditions.

NOTE

500kv highline rights of way exist in Calvert, Anne Arundel, and Prince George's counties.

1.1. One of the following conditions exists for CCNPP's location **OR** for the right of way of any of the 500kv high lines:

☐	Tornado Watch	☐	Hurricane Warning
☐	Hurricane Watch	☐	Severe Winter Storm (ice or snow) that may affect Nuclear Safety/Production and ERO response
☐	Winds Predicted greater than 50 mph	☐	Severe Weather conditions warranting emergency response (**PER** Shift Manager)
☐	Tornado Warning	☐	*Severe weather with a potential for station flooding trigger point

*The station has experienced greater than 11.2 inches of rain in a 6 hour period **AND** a dry period of 2 to 3 days has occurred and rainfall is predicted at the station in excess of 18 inches in 6 hours **OR** rainfall is predicted to be greater than or equal to 3 inches per hours.

Expected time of onset and duration of severe weather:

_____

1.2. **IMPLEMENT** EP-1-108, Severe Weather, in parallel with this attachment.

2.0 **NOTIFY** station personnel, as follows:

2.1. **SOUND** Emergency Alarm for 5 seconds.

2.2. **ANNOUNCE**: "There is a severe weather condition in effect." (Give nature of severe weather.)

2.3. **REPEAT** once.

2.4. **CONTACT** Station Duty Manager **AND** **COORDINATE** with him the actions necessary to minimize potential missile hazards and/or prepare station for approaching severe weather.

2.5. **IF** implementing this attachment for a Tornado or Hurricane warning, **THEN NOTIFY** NRC Resident with a courtesy call.

NOTE

The initial steps required to be performed are dependent on severe weather conditions present. The Operations Shift Manager will determine required initial response steps that need to be completed.

3.0 **COMPLETE** initial response to Severe Weather, as follows:

3.1. **CLOSE** manways **AND** penetrations in Intake Structure.

3.2. **CONSIDER** isolating nitrogen to 12 Condensate Storage Tank PER OI-4, Nitrogen Gas System, to avoid loss of nitrogen due to evacuation of tank loop seal from high winds. **[B1154]**

3.3. **EVACUATE** trailers at wind speed greater than 50 mph. **[B1154]**

3.4. **ENSURE** 13kv Service Bus 23 is energized from SMECO **PER** OI-27E. **[B1153]**

3.5. **MAXIMIZE** Condensate Storage Tank inventories. **[B1153]**

3.6. **COMPLETE** tours of outside areas to identify and address issues challenging station's preparedness for onset of severe weather.

3.7. **ASSIGN** an individual to monitor weather conditions at least hourly throughout event.

3.8. **INVOKE** a "two man rule", as appropriate, for personnel safety for people dispatched outside during severe weather conditions.

3.9. **CONSIDER** shift personnel hold over or recall plans should severe weather affect the ability for oncoming shifts to relieve the watch.

3.9.1. **RECALL** personnel early enough to avoid travel through severe weather.

3.10. **PERIODICALLY MONITOR AND RESPOND** to plant condition challenges based on severe weather:

- Rain water intrusion and accumulation.
- Snow or ice accumulation, especially that affecting DG ventilation and cooling systems.
- Building damage that could lead to challenges to operating equipment.

4.0 **DETERMINE** need for further response.

4.1. **IF** a Tornado watch/warning or Hurricane watch/warning is in effect, **THEN CONTINUE** with remaining steps of this attachment.

4.2. **IF** severe weather other than tornado watch/warning or hurricane watch/warning is approaching, **THEN:**

4.2.1. **COMPLETE** remaining steps of this attachment as determined appropriate by Shift Manager.

4.2.2. **UPDATE** station on event progress as appropriate.

4.2.3. **SECURE** from severe weather event per last step of this attachment.

NOTE

Steps 5.0 through 8.0 can be completed concurrently and in any order. Once weather conditions subside, this attachment can be exited without completion of all remaining steps by proceeding to last step in this attachment for event termination. Completion of preparatory steps should be expedited based on approaching speed of severe weather.

5.0 **PERFORM** escalated response to Severe Weather conditions.

5.1. **SECURE** all fuel handling operations **AND** **PLACE** fuel in safe condition.

5.2. **ENSURE** 1B, 2A, and 2B DG's are aligned to 21 FOST **PER** OI-21D.

5.3. **ENSURE** Aux Boilers are aligned to 11 FOST **PER** OI-21D.

5.4. **IF** a tornado watch/warning exists,
THEN START 1B, 2A, and 2B DG Room ventilation fans by taking local handswitches to start.

5.5. **ENSURE** Operations crews on shift review the following procedures as determined appropriate by Shift Manager:

- AOP-7L, Circulating Water/Intake Malfunctions
- AOP-7M, Major Grid Disturbance
- EOP-7, Site Blackout **[B1153]**
- EOP-2, Loss of Offsite Power **[B1153]**
- AOP-3F, Loss of Offsite Power in Modes 3,4,5, and 6 **[B1153]**

5.6. **SECURE** maintenance or testing not essential for plant operations that:

- reduces electrical reliability of units.
- places either unit in a Medium Trip or CDF risk condition.
- places personnel or equipment at risk due to the weather itself or due to increased potential to lose electrical power.
- is classified High Risk **PER** CNG-OP-4.01-1000, Integrated Risk Management, unless that work has its own specific severe weather contingencies.

5.7. **INVOKE** contingency plans in place to address onset of severe weather.

5.8. **ENSURE** the following systems are available or initiate reasonable actions to restore them to full service before onset of severe weather:

- AFW systems
- Atmospheric Dump Valves
- Diesel Generators
- Station Batteries, Battery Chargers, and Vital Inverters
- Out of service safety related busses, transformers, or supply breakers

5.9. **PERIODICALLY CONTACT** Electric System Operator (ESO) for any impact to power distribution high lines.

6.0 **TAKE** preparatory actions for units in lower mode conditions, as follows:

6.1. For Unit in **Mode 5**:

6.1.1. **ENSURE** Containment Closure is established.

6.1.2. **ENSURE** Equipment Hatch is installed with all 20 hatch eyebolts.

6.1.3. **IF** Steam Generators are not available for heat removal,
THEN RAISE RCS level to about 160 inches in pressurizer to ensure adequate inventory is available in event of a Station Blackout. **[B1165]**

6.1.4. **IF** plant conditions do not allow for completion of above three items,
THEN EXPEDITE maintenance to ensure RCS can be filled **AND** containment closure established.

6.2. For Unit in **Mode 6:**

6.2.1. **VERIFY** all fuel handling is secured **AND** all fuel is in safe condition.

6.2.2. **ENSURE SHUT** SFP Transfer Gate Valve.

6.2.3. **MAINTAIN** Containment Closure.

6.3. For Unit that is **Defueled:**

6.3.1. **MAINTAIN** SFP temperature less than 90 degrees.

6.3.2. **CONSIDER** establishing containment closure.

6.3.3. **IF** a hurricane is approaching within 8 hours,
THEN ESTABLISH containment closure.

7.0 **TAKE** actions for approach of tornado. (N/A if not in tornado warning).

7.1. **ASSIGN** individuals responsibility for the following post tornado response actions:

7.1.1. **LINE UP** Control Room/Cable Spreading Room ventilation for fresh air mode PER OI-22F, should the roof condensers be lost.

7.1.2. **RESTORE** Switchgear Room ventilation **PER** OI-22H, should it be lost.

7.1.3. **OPEN** respective battery room doors **AND** ensure lighting is secured, should 27 ft. battery room supply or exhaust systems be lost.

7.1.4. **INSPECT** 69 ft. Auxiliary Building HVAC Equipment Room 512 air duct for integrity.

1. **IF** found degraded,
THEN INFORM Shift Manager to initiate immediate repairs.

7.2. **IF** an operating DG trips on high crankcase pressure due to a tornado approach,
THEN RESTART DG **PER** appropriate OI-21 if it is needed for electrical power and not otherwise damaged.

7.3. **REVIEW** EALs based on damage to plant.

7.3.1. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel, the appropriate attachment based on event classification.

7.4. **UPDATE** station on event progress, as appropriate.

8.0 **TAKE** actions for approach of hurricane. (N/A if not in a hurricane warning)

8.1. **ENSURE** all watertight doors are shut (Intake, AFW, SRW, and ECCS PP RM).

8.2. **START**, **LOAD**, **AND SHUTDOWN** each DG **PER** OI-21 A, B, and C.

8.3. **UPDATE** current maximum Saltwater Header Pressures carried on turnover sheet **PER** OI-29. **[B1155]**

8.4. **UPDATE** station on event progress as appropriate.

8.5. **WHEN** Hurricane is predicted to arrive within **16 hours**,
THEN SUSPEND routine plant maintenance as necessary to support hurricane preparation.

8.6. **WHEN** Hurricane is predicted to arrive within **12 hours**,
THEN COORDINATE with security to release personnel that do not have hurricane response responsibilities.

8.7. **WHEN** Hurricane is predicted to arrive within **8 hours**,
THEN SHUTDOWN operating units to Hot Standby condition (Mode 3). **[B1153]**

8.8. **WHEN** Hurricane is predicted to arrive within **4 hours**,
THEN RECALL personnel as necessary. **[B1153]**

8.9. **WHEN** Hurricane is predicted to arrive within **2 hours**,
THEN:

8.9.1. **SUSPEND** all non-essential work.

8.9.2. **ESTABLISH** accountability for all on station personnel.

8.9.3. **REVIEW** Tech Spec/Technical Requirements Manual actions/surveillance requirements that may need to be suspended for personnel safety.

8.9.4. **DETERMINE** applicability of Notice of Enforcement Discretion (Refer to CNG-NL-1.01-2004, Obtaining NRC Enforcement Discretion) or 10 CFR 50.54(x) (log readings, fire watch tours, watertight door checks).

8.10. **WHEN** Hurricane is predicted to arrive within **1 hour**,
THEN:

8.10.1. **ENSURE** all personnel on station are accounted for **AND** located within structures that are reasonably likely to withstand hurricane force winds.

8.10.2. **CONSULT** with Security Shift Supervisor to ensure any necessary security procedure deviations have Shift Manager (SRO) approval.

8.11. **REVIEW** EALs based on plant conditions.

8.11.1. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel, the appropriate attachment based on event classification.

Attachment 20, Severe Weather (Continued)

9.0 **TERMINATE** the event, as follow:

9.1. **WHEN** severe weather conditions have subsided,
THEN ANNOUNCE, "Now secure from severe weather. Now secure from severe weather."

9.2. **RELEASE** any personnel on duty due to severe weather.

9.3. **CONTACT** Engineering to conduct post-storm area walk downs for equipment or structural damage and water intrusion as determined appropriate by Shift Manager.

9.4. **IF** station has experienced wind speeds of greater than or equal to 50 mph,
THEN CONTACT Electrical Maintenance to perform thermography on switchyard components and connection points with plant.

9.5. **ENSURE** equipment operated, areas secured, equipment staged as part of storm response are restored as appropriate.

9.6. **REVIEW** Regulatory Reporting procedure for any necessary reports.

Termination: Time: _____ **Date:** _____

Attachment 21, Deleted

Attachment 22, Hazardous Material And Offsite Oil Spill Response

NOTE

Attachment 22 implements the requirements of basis **[B09631]**.

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Caller's Name: _____ Number to reach:_____

Spilled Material is: _____

- ___ Known Hazardous Material ___Unknown if Hazardous ___ Not Hazardous
- Spill is from a: ___Drum ___Tank ___ Pipe ___ Vehicle
  Other/Details;_____
- Spill's Estimated Size is: _____ (gallons pints ounces)
- _____ ft diameter pool on ground _____ ft^3 in air _____ unknown at this time
- Spill's Location: _____
- Spill is: ___Reaching Bay ___Reaching Bay Drain ___Reaching Soil
- ___ On Concrete/Asphalt surface ___Contained Other:_____
- Form of Material Spilled is: ___Oil ___Liquid ___ Gaseous ___ Powder
  Other/Details;_____

2.0 **ADVISE** person reporting spill to:

- have other people leave area,
- prevent anyone else from entering area, and
- remain in a safe location until Fire and Safety Watch (FASW) responds.

3.0 **IF** an unknown, potentially hazardous atmosphere exists,
THEN DIRECT FASW to obtain Multirae Photo Ionizing Detector (PID) before responding.

4.0 **IF** a significant offsite oil spill immediately threatens the ability of plant to maintain its ultimate heat sink,
THEN:

4.1. **COMMENCE** shutdown of both units at the rate necessary to maintain safety margin and avoid an automatic trip. (Expeditious shutdown, rapid down power or manual trip.)

4.2. **SECURE** Circulating Water Pumps as plant conditions allow **BY UTILIZING** a strategy to protect Salt Water Pumps.

4.2.1. **CONSIDER** backflowing some waterboxes as a method to avoid contaminant intrusion in Salt Water Systems.

4.3. **CONSIDER** switching/securing Salt Water Pumps as a strategy to preserve at least one unaffected Salt Water Subsystem as long as possible.

4.4. **IMPLEMENT** appropriate Emergency and Abnormal Operating Procedures to cope with conditions established to minimize impacts to ultimate heat sink.

4.5. **MAXIMIZE** availability of other systems important to core heat removal. (AFW, ADV's, ECCS, PORV's, CST's, etc.)

4.6. **DIRECT** immediate protective actions as recommended by Plant Management, County and State Authorities, and Federal Authorities.

4.6.1. **CONSIDER** installation of oil absorbing booms along intake baffle wall for significant oil spills.)

5.0 **ACTIVATE** response personnel.

5.1. **IF** Spill warrants Station Wide Attention,
THEN:

5.1.1. **SOUND** Emergency Alarm for 5 seconds.

5.1.2. **ANNOUNCE**: "There is a hazardous material spill." (**GIVE** location, material type if known, and estimated amount.) "Fire and Safety Watch and Shift Chemistry Technician respond."

5.1 (Continued)

5.1.3. **IF** day staff personnel are present,
THEN ALSO ANNOUNCE: "Safety Services Unit and Controlled Material Coordinator respond."

5.1.4. **ANNOUNCE**: "All other personnel stay clear of the affected area."

5.1.5. **REPEAT** once.

5.1.6. **HAVE** FASW shift radio channels to 1D.

5.2. **IF** Spill does not warrant Station Wide Attention,
THEN:

5.2.1. **DIRECT** FASW and CST to evaluate spill and determine appropriate actions.

5.2.2. **IF** Safety Services Unit and Controlled Material Coordinator are available,
THEN CONTACT them for response to scene.

6.0 **CONFIRM AND MONITOR** response.

6.1. **CONFIRM** spill response by contacting FASW via radio or plant page.

6.2. **MONITOR** FASW radio traffic by selecting Channel 1D or 1H as appropriate on CRS console.

6.3. **HAVE** CRO radio remain on Channel 1H with volume turned up.

7.0 **MAINTAIN** Control Room HABITABILITY.

7.1. **IF** a strong chemical odor is present in Control Room
OR nature of spill makes atmospheric chemical intrusion into Control Room a possibility,
THEN:

7.1.1. **SECURE** toilet exhaust fan.

7.1.2. **CONSIDER** SCBA respiratory protection for operators.

8.0 **DETERMINE** status of spill response.

8.1. **DIRECT** FASW **TO EVALUATE** whether spill is a "reportable hazardous material release" for making offsite notifications **PER** Hazardous Material and Oil Spill Response Plan.

8.2. **DETERMINE** if Operational Technical Assistant (OTA) should report to scene to provide Operations Oversight of Spill Response.

8.2.1. **IF** dispatched,
THEN HAVE OTA select Radio Channel 1H to monitor for operational concerns.

8.3. **DETERMINE** if Incident Command response should be established based on conditions at scene.

NOTE
FASW can directly communicate with offsite responding units on Radio Channel 1E.

8.3.1. **CALL** for Offsite Assistance by contacting CAS/SAS (495-4695).

9.0 **REVIEW** Emergency Action Levels.

9.1. **REVIEW** EALs based on event considering impact on accessing plant areas.

9.2. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel, the appropriate attachment based on event classification.

10.0 **CONTINUE** to monitor event **AND** direct assistance to scene as requested by FASW or Scene Leader.

10.1. **REVIEW** Hazardous Material and Oil Spill Response Plan for mitigating actions.

10.2. **IMPLEMENT** actions **PER** Response Plan, Scene Leader, and OTA.

10.3. **CONSIDER** securing or realigning ventilation and sumps impacted by scene.

10.4. **CONSIDER** methods to contain spill until clean up can be affected.

10.5. **CONSIDER** evacuation, restricting access, or isolation of certain areas to maintain personnel safety.

10.6. **CONSIDER** strategies for maintaining access to areas and equipment, especially Safety Related and safe shutdown areas/equipment.

10.7. **EVALUATE** need to call in additional operators to assist with spill or to assume watch stations to allow other operators to assist with incident.

11.0 **UPDATE** station on event progress via announcements, as appropriate.

12.0 **TERMINATE** event, as follows:

12.1. **WHEN** notified by FASW or Scene Leader that event may be terminated **AND** if station announcements were made, **THEN ANNOUNCE**:

"Now secure from the Hazardous Material Spill. Now secure from the Hazardous Material Spill."

12.2. **ENSURE** equipment and areas secured as part of spill response are restored as appropriate.

12.3. **REVIEW** Regulatory Reporting **AND** PCB Management procedures for any necessary reports.

Termination: Time: _____ **Date:** _____

Attachment 23, Containment Evacuation

Implementation: Time: _____ **Date:** _____

1.0 **RECORD** the following information:

Reason for Evacuation:_____

Existing Radiological Hazards: _____

Evacuation Routes: ___ East Stairwell ___West Stairwell ___ Both

Exit Points: ___ EAL ___ PAL ___ Eq Hatch

Assembly Area: ___ Containment Airlock Access ___ Spent Fuel Pool Area
___ Butler Bldg ___ Controlled Area Access

2.0 **INITIATE** Containment evacuation.

NOTE
Announcements in Containment are difficult to understand. Radiation Protection must initiate their evacuation plan to ensure all personnel are properly notified.

2.1. **CONTACT** Radiation Protection (and Outage Management) **AND**
PROVIDE them with above details **AND**
DIRECT them to initiate containment evacuation.

2.2. **SOUND** Emergency Alarm for 5 seconds.

2.3. **ANNOUNCE**: "Evacuate Unit-1 (2) Containment."

2.3.1. **DESCRIBE** reason for evacuation.

2.4. **ANNOUNCE**: "Radiation Protection assemble and account for personnel."

2.5. **REPEAT** once.

3.0 **CONFIRM AND MONITOR** response.

3.1. **CONFIRM** evacuation is underway by contacting Radiation Protection via phone or radio.

3.2. **NOTIFY** Security (495-4695) of Containment Evacuation.

FORWARD THIS ATTACHMENT TO THE DIRECTOR – EMERGENCY PREPAREDNESS.

Attachment 23, Containment Evacuation (Continued)

3.3. **RECEIVE** report status of accountability **AND** missing personnel from security.

3.4. **IF** personnel are missing
AND conditions allow time for search and rescue,
THEN NOTIFY Radiation Protection, First Aid Team, and Security to initiate search and rescue efforts.

3.5. **IF** an accidental release of radioactivity is occurring,
THEN IMPLEMENT Radiological Event attachment in parallel.

3.6. **CONSIDER** establishment of Containment Closure to limit release of radioactivity. (Not to interfere with evacuation.)

3.7. **PROVIDE** updates via station announcements on plant conditions as appropriate.

4.0 **REVIEW** Emergency Action Levels (EALs).

4.1. **REVIEW** EALs based on existing conditions.

4.2. **IF** an EAL is satisfied,
THEN IMPLEMENT in parallel, the appropriate attachment based on event classification.

5.0 **TERMINATE** event, as follows:

5.1. **WHEN** Containment evacuation is complete
OR no longer needed,
THEN:

5.1.1. **TERMINATE** the event.

5.1.2. **ANNOUNCE**:

"Unit 1 (2) Containment Evacuation is now complete."

OR

"Containment Evacuation is no longer needed. Normal Access to the Containment is restored."

5.2. **REVIEW** Regulatory Reporting procedure for any necessary reports.

Termination: Time: _____ **Date:** _____

FORWARD THIS ATTACHMENT TO THE DIRECTOR – EMERGENCY PREPAREDNESS.

Attachment 24, Security

NOTE

- Bases **[B1159] [B1162] [B1167] [B1168] [B1200] [B1833]** apply to this entire attachment.
- The Shift Manager should apply situational judgment, and work with Security Shift Supervisor to determine and coordinate actions required in this attachment. The Shift Manager may deviate from this procedure to protect safety of Plant Personnel or health/safety of public.
- Section 1.0, Assess the Emergency, is continuously applicable while performing this attachment.

The following information dictates required action in subsequent sections:

- **Large Threat Aircraft** –
  An Airliner heading to CCNPP **OR** a non-airliner that has been identified as a large threat aircraft by NRC or NORAD and is heading to CCNPP.
- **Imminent Airborne Threat** –
  A large threat aircraft that is <u>less than</u> 5 minutes from station;
  A large threat aircraft is locally observed heading to CCNPP;
  Shift Manager's Judgment that an approaching aircraft is a large threat.
- **Probable Airborne Threat** –
  Large threat aircraft that is <u>greater than</u> 5 minutes but <u>less than</u> 30 minutes from station.
- **Informational Airborne Threat** –
  Any aircraft threat that is <u>greater than</u> 30 minutes from station.

A non-airliner aircraft that is **NOT** a large threat should only require performance of Section 4.0, Informational Airborne Threat.

1.0 ASSESS THE EMERGENCY.

1.1. **GO** to applicable section of this attachment:

- Section 2.0, Imminent Airborne Threat
- Section 3.0, Probable Airborne Threat
- Section 4.0, Informational Airborne Threat
- Section 5.0, Confirmed Armed Intrusion into the Protected Area
- Section 6.0, Confirmed Armed Intrusion into the Owner Controlled Area

Attachment 24, Security (Continued)

1.1 (Continued)

- Section 7.0, Confirmed Security Threat Identified by Nuclear Security Shift Supervisor
- Section 8.0, Station-Specific Imminent Alert from National Terrorism Advisory System (NTAS)
- Section 9.0, Non-Station-Specific Imminent Alert from National Terrorism Advisory System (NTAS)
- Section 10.0, Additional Actions to Evaluate as Appropriate to the Situation
- Section 11.0, ERO Notification
- Section 12.0, Event Termination

1.2. **CLASSIFY** event **PER** Emergency Action Level Documents (EAL-TB, EAL-HOT, EAL-COLD) concurrently with continuing this attachment.

1.2.1. **RECALL** extra operations and emergency response personnel to alternate emergency response locations.

1.3. **IF** Threat Alert condition changes,
THEN:

1.3.1. **CALL** Security at 495-4682.

1.3.2. **REASSESS** applicable section chosen in Step 1.1.

1.3.3. **REFER** to Section 10, Additional Actions to Evaluate as Appropriate to the Situation, for other actions necessary for security event.

2.0 IMMINENT AIRBORNE THREAT

NOTE

The reactors are not to be tripped before threat notification is validated as credible; however, this section is to be performed concurrent with validation.

2.1. **IF ANY** of the following conditions are met:

- Notification by NRC or NORAD that a large-threat aircraft is heading toward CCNPP **AND** is in 5 minutes of station.
- Notification of an airborne threat to CCNPP from sources other than NRC or NORAD, that is specific and credible, of a small aircraft heading toward station that presents a greater threat than its size would indicate **AND** is in 5 minutes of station.
- Shift Manager's judgment an approaching aircraft is a threat.
- A large-threat aircraft is locally observed.

THEN threat is **IMMINENT**.

2.2. **IF** airborne threat is **Imminent** (less than 5 minutes)
AND is **credible**,
THEN:

2.2.1. **CONCURRENTLY** with the following steps, **VALIDATE** authenticity of incoming call as follows:

1. **IF** call is from NRC, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call using daily authentication code.

2. **IF** call is from NORAD, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call with NRC using daily authentication code.

3. **IF** call is from any other source other than NRC or NORAD, **THEN** threat must still be validated by calling NRC using daily authentication code.

Attachment 24, Security (Continued)

2.2 (Continued)

2.2.2. **IF** airborne threat is Imminent
AND is Credible,
THEN TRIP both Reactors **AND IMPLEMENT** EOP-0.

2.2.3. **MAINTAIN OR REGAIN** continuous communication lines between original threat source and any available Operations Personnel.

2.2.4. **IF** NRC did NOT notify station of airborne threat,
THEN NOTIFY NRC as soon as practical, but within 15 minutes of security threat **AND MAINTAIN CONTINUOUS COMMUNICATION**.

2.2.5. **NOTIFY** Plant Personnel by performing the following:

1. **SOUND** emergency Public Address (PA) alarm for 5 seconds.

2. **ANNOUNCE** "Attention all plant personnel. Attention all plant personnel. An Imminent Aircraft Threat exists. [[

]]

3. **REPEAT** Steps 2.2.5.1 and 2.2.5.2 once.

4. **REPEAT** Steps 2.2.5.1 and 2.2.5.2 as updated information becomes available.

NOTE

IF threat is during daylight hours or time does not permit, **THEN** Shift Manager may defer from opening lighting breakers.

2.2.6. **SECURE** Priority 1 lighting as follows:

1. **DIRECT** Operations to secure the following:

   a. [[

   -
   -
   -
   -

   ]]

2. **DIRECT** Security Shift Supervisor to secure the following:

   a. [[

   -
   -
   -]]

2.2.7. **NOTIFY** Security Shift Supervisor of NRC notification and evacuation.

2.2.8. [[

]]

2.2.9. **IF** handling fuel,
THEN NOTIFY Fuel Handling Supervisor to **PLACE** fuel assemblies in secure locations **AND DISCONTINUE** fuel handling operations.

2.2.10. **START** Emergency Diesel Generators but do **NOT** load them onto bus.

2.2 (Continued)

2.2.11. **MAINTAIN** Steam Generator water level high in normal band.

2.2.12. **VERIFY** Control Room ventilation in recirculation mode.

2.2.13. **IF** communications were NOT continuously maintained, **THEN RE-ESTABLISH** communication with NRC Headquarters as soon as practical after aircraft impact **OR** within 5 minutes after anticipated impact time if no impact occurs.

2.2.14. Following aircraft attack, **EVALUATE** recalling ERO from alternate ERFs to staff designated ERFs as appropriate.

2.2.15. **PERFORM** additional items from Section 3, Probable Airborne Threat, as time permits.

3.0 PROBABLE AIRBORNE THREAT

NOTE

- If the airborne threat escalates to Imminent (5 minutes or less), then the actions of Section 2 should be performed.
- The reactors are not to be tripped before threat notification is validated as credible; however, this section is to be performed concurrent with validation.

3.1. **IF** airborne threat is **Probable** (greater than 5 minutes but less than 30 minutes),
THEN:

3.1.1. **CONCURRENTLY** with the following steps, **VALIDATE** authenticity of incoming call as follows:

1. **IF** call is from NRC, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call using daily authentication code.

Attachment 24, Security (Continued)

3.1.1 (Continued)

2. **IF** call is from NORAD, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call with NRC using daily authentication code.

3. **IF** call is from any other source other than NRC or NORAD, **THEN** threat must still be validated by calling NRC using daily authentication code.

3.1.2. **MAINTAIN** continuous communication lines between original threat source and any available Operations Staff.

1. **IF** original threat notification source is not NRC HQ Operations Center,
   THEN ESTABLISH continuous communication with NRC HQ Operations Center at earliest practical

NOTE

IF threat is during daylight hours or time does not permit, **THEN** Shift Manager may defer from opening lighting breakers.

3.1.3. **SECURE** Priority 1 lighting per Step 2.2.6.

3.1.4. **SECURE** Priority 2 lighting as follows:

1. **DIRECT** Operations to secure the following:

   a. [[

   •

   b.

   •

]]

Attachment 24, Security (Continued)

3.1.4 (Continued)

2. **DIRECT** Security Shift Supervisor to secure the following:

   a. [[

      •

      •

   b.

      •

   c.

      •

      •

]]

3.1.5. [[

]]

3.1.6. **IF** handling fuel,
THEN NOTIFY Fuel Handling Supervisor to **PLACE** fuel assemblies in secure locations **AND DISCONTINUE** fuel handling operations.

Attachment 24, Security (Continued)

3.1 (Continued)

3.1.7. **NOTIFY** Plant Personnel by performing the following:

1. **SOUND** emergency Public Address (PA) alarm for 5 seconds.

2. **ANNOUNCE** "Attention all plant personnel. Attention all plant personnel. A Probable Aircraft Threat exists.
[[

]]

3. **REPEAT** Steps 3.1.7.1 and 3.1.7.2 once.

4. **REPEAT** Steps 3.1.7.1 and 3.1.7.2 as updated information becomes available.

3.1.8. **IF** NRC **DID NOT** notify station of airborne threat, **THEN NOTIFY** NRC as soon as practical, but within 15 minutes of security threat **AND MAINTAIN CONTINUOUS COMMUNICATION**.

3.1.9. **NOTIFY** Security Shift Supervisor of NRC notification and evacuation.

NOTE

The reactors are *not* to be shutdown before threat notification is validated as credible; however, this section is to be performed concurrent with validation.

3.1.10. **IF** Probable airborne threat notification is credible, **THEN COMMENCE** a rapid downpower of **BOTH** units.

1. **IF** airborne threat notification is not credible, **THEN COMMENCE** only a rapid downpower of **BOTH** units if/when validated as credible and probable.

Attachment 24, Security (Continued)

3.1 (Continued)

3.1.11. **PLACE** Control Room ventilation in recirculation mode.

3.1.12. **VERIFY** closed Control Room doors, all Fire Doors, all Watertight Doors and Turbine Building Rolling Doors.

3.1.13. **DISPERSE** fire brigade to secondary fire brigade locker **AND STATION** fire engine away from target areas, not to interfere with plant operations.

3.1.14. **STATION** personnel at DGs to start when required **PER** Shift Manager.

3.1.15. **START** fire pumps as needed to pressurize fire header.

3.1.16. **IF** in **MODE 5 or 6**,
THEN SECURE containment purge **AND ESTABLISH** containment Closure/integrity.

3.1.17. **SUSPEND** in-progress surveillance testing **AND RETURN** affected equipment to functional status.

3.1.18. **SUSPEND** in-progress maintenance activities **AND RETURN** affected equipment to functional status.

3.1.19. **INITIATE** action to restore inoperable ECCS equipment to operable status.

3.1.20. **ENSURE** systems are available for reactor shutdown and ATWS mitigation (RPS).

3.1.21. **IF** leakage is indicated,
THEN CONSIDER isolating shutdown cooling **PER** AOP-3B.

3.1.22. **COMMENCE** fill of CSTs to upper limit of operating band.

3.1.23. **VERIFY** other makeup water source inventories are above established minimums (DWST, PWST).

3.1.24. **ENSURE** decay heat removal systems available (AFW, SDC, main condenser).

3.1.25. **IF** leakage is indicated,
THEN CONSIDER isolating SFP cooling **PER** AOP-6F.

Attachment 24, Security (Continued)

3.1 (Continued)

3.1.26. **NOTIFY** Radiation Protection personnel to relocate with Survey Vehicle **AND** emergency kits outside Protected Area.

3.1.27. **STATION** operators at remote shutdown panels.

3.1.28. **WHEN** plant conditions allow,
THEN SECURE all possible station building fans to limit number of building supply and exhaust fans.

3.1.29. **MINIMIZE** number of operating turbine building fans.

3.1.30. After aircraft impact, **EVALUATE** recalling ERO from Alternate ERFs to staff normal ERFs as appropriate.

3.1.31. **PERFORM** additional items from Section 4, Informational Airborne Threat as time permits.

4.0 INFORMATIONAL AIRBORNE THREAT

4.1. **IF** airborne threat escalates to Imminent (5 minutes or less), **THEN** actions of Section 2, Imminent Airborne Threat should be performed.

4.2. **IF** airborne threat escalates to Probable (greater than 5 minutes but less than 30 minutes), **THEN** actions of Section 3, Probable Airborne Threat, should be performed.

4.3. **IF** airborne threat is **Informational** (greater than 30 minutes),
THEN:

4.3.1. **CONCURRENTLY** with the following steps, **VALIDATE** authenticity of incoming call as follows:

1. **IF** call is from NRC, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call using daily authentication code.

2. **IF** call is from NORAD, **THEN** call should be considered to be credible.

   a. **AUTHENTICATE** call with NRC using daily authentication code.

Attachment 24, Security (Continued)

4.3.1 (Continued)

3. **IF** call is from any other source other than NRC or NORAD, **THEN** threat must still be validated by calling NRC using daily authentication code.

4.3.2. **MAINTAIN** continuous communication lines between original threat source and any available Operations Staff.

4.3.3. **IF** NRC **DID NOT** notify station of airborne threat, **THEN NOTIFY** NRC as soon as practical, but within 15 minutes of security threat **AND MAINTAIN CONTINUOUS COMMUNICATION**.

4.3.4. **SECURE** Priority 1 lighting per Step 2.2.6.

4.3.5. **SECURE** Priority 2 lighting per Step 3.1.4.

4.3.6. **SECURE** Priority 3 lighting as follows:

1. **DIRECT** Operations to secure the following:

- [[

]]

4.3.7. **NOTIFY** Security Shift Supervisor of NRC notification and evacuation.

4.3.8. **IF** handling fuel, **THEN NOTIFY** Fuel Handling Supervisor to **PLACE** fuel assemblies in secure locations **AND DISCONTINUE** fuel handling operations.

Attachment 24, Security (Continued)

4.3 (Continued)

NOTE

The following personnel do not evacuate subsequent to evacuation announcement:

- [[
-
-]]
- On-shift Nuclear Security personnel

4.3.9. **NOTIFY** Plant Personnel by performing the following:

1. **SOUND** the emergency Public Address (PA) alarm for 5 seconds.

2. **ANNOUNCE** "Attention all plant personnel. Attention all plant personnel. An Informational Aircraft Threat exists. [[

]]

3. **REPEAT** Steps 4.3.9.1 and 4.3.9.2 once.

4. **REPEAT** Steps 4.3.9.1 and 4.3.9.2 as updated information becomes available.

4.3.10. **PREPARE** to commence a rapid down power of **BOTH** units.

4.3.11. **PLACE** Control Room ventilation in recirculation mode.

4.3.12. **NOTIFY** Security Shift Supervisor that security lights will be turned off if airborne threat escalates to **IMMINENT** or **PROBABLE**.

Attachment 24, Security (Continued)

4.3 (Continued)

4.3.13. **RECALL** personnel from NOF as needed to supplement Operations.

4.3.14. **PREPARE** to disperse fire brigade **AND** **STATION** fire engine away from target areas, not to interfere with plant operations.

4.3.15. **PREPARE** to station personnel at DGs to start when required **PER** Shift Manager.

4.3.16. **STOP** in-progress surveillance testing/maintenance **AND** **RETURN** equipment to functional status.

4.3.17. **START** fire pumps as needed to pressurize fire header.

4.3.18. **RESTORE** inoperable ECCS equipment to operable (LPSI, HPSI, CS).

4.3.19. **VERIFY** closed Control Room doors, all fire doors, all watertight doors and Turbine Building rolling doors.

4.3.20. **IF** in **MODE 5 or 6,** **THEN SECURE** containment purge **AND ESTABLISH** containment Closure/integrity.

4.3.21. **INITIATE** action to restore inoperable ECCS equipment to operable status.

4.3.22. **ENSURE** systems are available for reactor shutdown and ATWS mitigation (RPS).

4.3.23. **IF** leakage is indicated, **THEN CONSIDER** isolating shutdown cooling **PER** AOP-3B.

4.3.24. **COMMENCE** fill of CSTs to the upper limit of operating band.

4.3.25. **VERIFY** other makeup water source inventories are above established minimums (DWST, PWST).

4.3.26. **ENSURE** decay heat removal systems available (AFW, SDC, main condenser).

4.3.27. **IF** leakage is indicated, **THEN CONSIDER** isolating SFP cooling **PER** AOP-6F.

Attachment 24, Security (Continued)

4.3 (Continued)

4.3.28. **NOTIFY** Radiation Protection personnel to relocate with Survey Vehicle and emergency kits outside Protected Area.

4.3.29. **STATION** operators at remote shutdown panels.

4.3.30. **WHEN** plant conditions allow,
THEN SECURE all possible station building fans to limit number of building supply and exhaust fans.

4.3.31. **MINIMIZE** number of operating turbine building fans.

4.3.32. After aircraft impact, **EVALUATE** recalling ERO from Alternate ERFs to staff normal ERFs as appropriate.

5.0 CONFIRMED ARMED INTRUSION INTO THE PROTECTED AREA

5.1. **IF** a confirmed armed intrusion into Protected Area has occurred,
THEN COORDINATE with Security to dispatch Plant Operators to take cover in the following locations:

- [[
-
-
-
-
-]]

NOTE

Any plant announcement should be coordinated with Security Shift Supervisor to evaluate best response for considering personnel safety.

5.2. **IF** it is deemed that Plant Personnel should *remain where they are*,
THEN NOTIFY Plant Personnel by performing the following:

5.2.1. **SOUND** Emergency Alarm for 5 seconds.

5.2.2. **ANNOUNCE** "Attention all Plant Personnel. The Station is under attack. Take cover immediately."

Attachment 24, Security (Continued)

5.2 (Continued)

5.2.3. **REPEAT** above notification once.

5.3. **IF** it is deemed that Plant Personnel should *evacuate* a certain area, **THEN NOTIFY** Plant Personnel by performing the following:

WARNING

Take into consideration nature of emergency in determining if people can be assembled and accounted for in normal NOF assembly area. Give directions for alternate assembly location as situation requires.

5.3.1. **SOUND** Emergency Alarm for 5 seconds.

5.3.2. **ANNOUNCE** "Attention all Plant Personnel, a security threat exists. Evacuate the following area(s) _____
by way of: _____
assemble at:_____
Report suspicious activities or persons to Nuclear Security on extension 911."

5.4. **REPEAT** above notification once.

5.5. **IF** notified by Security that intrusion into Protected Area is confirmed, **THEN TRIP BOTH REACTORS.**

5.6. **NOTIFY** the NRC as soon as practical, **BUT** within 15 minutes of security threat **AND MAINTAIN CONTINUOUS COMMUNICATION.**

Attachment 24, Security (Continued)

6.0 CONFIRMED ARMED INTRUSION INTO THE OWNER CONTROLLED AREA

6.1. **IF** a confirmed armed intrusion into Owner Controlled Area has occurred, **THEN IMMEDIATELY DISPATCH** Plant Operators to take cover in the following locations:

- [[
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-
-
-
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NOTE

Any plant announcement should be coordinated with Security Shift Supervisor to evaluate best response for considering personnel safety.

6.2. **IF** it is deemed that Plant Personnel should *remain where they are*, **THEN NOTIFY** Plant Personnel by performing the following:

6.2.1. **SOUND** the Emergency Alarm for 5 seconds.

6.2.2. **ANNOUNCE** "Attention all Plant Personnel. The Station is under attack. Take cover immediately."

6.2.3. **REPEAT** above notification once.

Attachment 24, Security (Continued)

6.3. **IF** it is deemed that Plant Personnel should *evacuate* a certain area, **THEN NOTIFY** Plant Personnel by performing the following:

WARNING

Take into consideration nature of emergency in determining if people can be assembled and accounted for in normal NOF assembly area. Give directions for alternate assembly location as situation requires.

6.3.1. **SOUND** Emergency Alarm for 5 seconds.

6.3.2. **ANNOUNCE** "Attention all Plant Personnel, a security threat exists. Evacuate the following area(s) _____
by way of: _____
assemble at:_____
Report suspicious activities or persons to Nuclear Security on extension 911."

6.3.3. **REPEAT** above notification once.

6.3.4. **IF** notified by Security that intrusion into Protected Area is imminent,
THEN TRIP BOTH REACTORS.

6.3.5. **NOTIFY** the NRC as soon as practical, **BUT** within 15 minutes of security threat **AND MAINTAIN CONTINUOUS COMMUNICATION**.

7.0 CONFIRMED SECURITY THREAT IDENTIFIED BY NUCLEAR SECURITY SHIFT SUPERVISOR

7.1. **COORDINATE** with Nuclear Security to summon assistance from available offsite support agencies.

7.2. **IF** Security event does *not* present an imminent or ongoing threat to plant safety,
THEN PERFORM actions of Section 10, Additional Actions to Evaluate as Appropriate to the Situation, of this attachment.

7.3. **CONSIDER** performing the following security actions for lesser threat levels as needed:

- **IF** an Elevated Alert is issued:
  - **LIMIT** public access to sensitive plant information, including web sites that could facilitate the planning of terrorist acts, such as design information, plant layout drawings, probabilistic risk assessment models and results, and plant simulators.
  - **DIRECT** Information Technology (IT) to evaluate computer and communication networks for safety and security vulnerabilities including modem access vulnerabilities, and address as necessary.
  - **CONDUCT** training, including simulator training, and ensure operational readiness for loss of ultimate heat sink events.
  - **EVALUATE** potential vulnerabilities to maintain or restore core cooling, containment, and spent fuel cooling, as a result of loss of intake structure.
  - **PERIODICALLY REVIEW** plans for plant actions to be taken in event of a terrorist attack that is imminent or occurring.
  - **PERIODICALLY REVIEW** Safeguards and Emergency plans and take actions to assure that emergency onsite staffing, facilities, and procedures are adequate to accomplish actions necessary for response to terrorist threats.

Attachment 24, Security (Continued)

7.3 (Continued)

- **PERIODICALLY REVIEW** specific guidance and strategies to maintain or restore core cooling, containment, and Spent Fuel Pool Cooling capabilities using existing or readily available resources (equipment and personnel) that can be effectively implemented under circumstances associated with loss of large areas of plant due to explosions or fire.
- **DETERMINE AND REVIEW** potential effect on plant and onsite evacuation strategies from damage to nearby hazardous facilities and other nearby sites and modify procedures and equipment, as necessary.
- **REVIEW** Severe Accident Management Guidelines (SAMGs) to include additional strategies to address events involving an increased terrorist threat.
- **DIRECT** Operations Work Coordinator **AND** Work Week Manager to provide enhanced priority to maintenance activities related to fire protection and security-related systems.
- **DIRECT** Security/Emergency Preparedness to implement tools previously developed to communicate relevant information to public for example: use of web site.
- **ASSESS** whether threat requires further refinement of preplanned protective measures.
- **COORDINATE** with Security/Emergency Preparedness to notify appropriate local, state and federal agencies to enhance ability to carry out rapid response to a credible security threat.
- **ENSURE** emergency response plan is in a full state of readiness by completing a re-evaluation or retest of response personnel, response facilities, and communication systems including the Public Notification System.
- **CONSIDER** additional limits on access to hazardous material storage **AND** additional limits on quantities of hazardous materials within Protected Area.
- **DIRECT** Security to advise offsite medical support to be prepared in event of hostile action causing personnel injury or wounds.

7.3 (Continued)

- **CONSIDER** need to implement communication protocols as agreed upon with stakeholders.

7.4. **REVIEW AND CONSIDER** enhancements to integrated response plans with local law enforcement agencies, State and Federal organizations as appropriate.

8.0 STATION-SPECIFIC IMMINENT ALERT FROM NATIONAL TERRORISM ADVISORY SYSTEM (NTAS)

NOTE

National Terrorism Advisory System (NTAS) Threat Alerts are credible Threats.

8.1. **IF** Imminent Alert is station-specific,
THEN:

8.1.1. **NOTIFY** Plant personnel by performing the following:

1. **SOUND** Emergency Alarm for 5 seconds.

2. **ANNOUNCE** "Attention all Plant personnel. An Imminent Alert has been issued. Emergency Director, EOF Communicator, and Radiation Assessment Director report to the EOF.

3. **REPEAT** above notification once.

8.1.2. **EVALUATE** need to move Emergency Response Organization members if Emergency Response Facilities are already staffed

8.1.3. **COORDINATE** with Security Shift Supervisor to determine need to evacuate non-essential personnel.

8.1.4. **PREPARE** a staffing plan to ensure safe operation of plant with minimum personnel necessary to enable effective response to an event.

8.1 (Continued)

8.1.5. **STAFF** Emergency Response Facilities (Key ERO only) by performing Section 11, ERO Notification.

1. **DETERMINE** with Security Shift Supervisor if staffing Alternative ERO facilities.

8.1.6. **COORDINATE** with Security/ERO to request offsite support, including local law enforcement agencies, State agencies, and Federal resources, as applicable.

9.0 NON-STATION-SPECIFIC IMMINENT ALERT FROM NATIONAL TERRORISM ADVISORY SYSTEM (NTAS)

9.1. **IF** an Imminent Alert has been issued
AND the threat is NOT station-specific,
THEN:

9.1.1. **STAFF** Emergency Response Facilities (Key ERO only) by performing Section 11.

9.1.2. **ALERT** Emergency Response Organization members of potential need to respond to an emergency using Section 11.

9.1.3. **COORDINATE** with Security/ERO to notify appropriate Federal agencies to ascertain their ability to carry out rapid response of available assets.

9.1.4. **DIRECT** Security to restrict access to facility to essential personnel only.

9.1.5. **DIRECT** Operations Work Control and Work Week Manager to implement Section 5.4, Increased Threat Level Plan of CNG-MN-4.01-1006.

9.1.6. **COORDINATE** with Security to summon required assistance from available offsite support agencies.

10.0 ADDITIONAL ACTIONS TO EVALUATE AS APPROPRIATE TO THE SITUATION

NOTE

Before dispatching personnel into plant, Shift Manager shall evaluate if a Security Escort is required.

10.1. **CONSIDER** performing the following actions as time allows at discretion of Shift Manager:

- **TRIP OR PERFORM** a shutdown of **BOTH** Reactors as appropriate to situation.
- **START** all available Diesel Generators **PER** OI-21 series.
- **START** a Fire Pump **PER** OI-20.
- **PLACE** Control Room Post-LOCI filters in service **PER** OI-22F.
- **ACTIVATE** the Fire Brigade.
- **MAXIMIZE** CST inventories.
- **SECURE** blowdown **AND**
  MAXIMIZE capacity of make-up water systems.
- **ENSURE** all decay heat removal systems are available.
- CONSIDER cooldown.
- **ENSURE** containment closure is established, as applicable.
- **ENSURE** the RCS is *not* in reduced inventory.
- **NOTIFY** Plant Personnel to lockdown or assemble, as appropriate to situation.
- **EVALUATE** need for implementation of two-person rule IAW SY-AA-101-132.
- **ENSURE** SCBAs are moved from DAS Rooms into Control Room.
- **REFERENCE** ICA and FFSM for equipment that may be lost pending location of Security event.
- **EVALUATE** need to activate "All-Call Beeper System" **PER** OAP-02-01 for additional operators.
- **REVIEW** AOPs: 3F, 4A, 7A, 7I, and 7J.
- **REVIEW** EOPs: 2, 3, and 7.
- **SECURE** all Fuel Handling activities, including shutting RFP/SFP Transfer Gates, as applicable. **[B1168]**

~~Page 24 of 25~~

~~Attachment 24, Security (Continued)~~

~~10.1 (Continued)~~

- ~~**ENSURE** SMECO 69kV line is available **AND** aligned to 23 Service Bus **PER** OI-27E.~~
- ~~**EVALUATE** contacting Safety Services to monitor station for flammable or toxic gases.~~
- ~~**EVALUATE** staffing Technical Support Center, as applicable.~~
- ~~**EVALUATE** recalling extra Operations and Emergency Response personnel to alternate Emergency Response locations.~~
- ~~**EVALUATE** the need for increased staffing to mitigate a Control System Cyber Attack, as warranted. **[B2347]**~~
- ~~**IF** sabotage event has occurred,~~
  ~~**THEN** SM to **NOTIFY** TSO Bulk Power **AND** CGG Generation Dispatch Desk.~~
- ~~**CONSIDER** using Operations lights and cameras to aid Security in mitigating situation.~~
- ~~**CONSIDER** using Spot Lights and thermal imaging equipment from on-site Fire Engines.~~

~~10.2. **IF** Security event has caused large losses of equipment,~~
~~**THEN EVALUATE** Attachment 25, Large Area Losses, to develop a recovery or mitigation strategy as applicable. **[B1168]**~~

~~10.3. **IF** Security event has *not* resulted in large losses of equipment,~~
~~**THEN EVALUATION** of Attachment 25, Large Area Losses, is optional.~~

~~**11.0 ERO NOTIFICATION**~~

~~11.1. **REFER** to EP-AA-112-100-F-57 ERONS NOTIFICATION DETAILS (CNG) for activation instructions.~~

12.0 EVENT TERMINATION

WARNING

The post-event communication of threat information should be held as Safeguards Information until determined otherwise.

12.1. **AFTER** concurring with Security Shift Supervisor,
THEN ANNOUNCE "Now secure from Security Event."

12.2. **IF** PA system is disabled,
THEN DISPATCH a security officer, if available, to NOF to make accountability notification.

12.3. **ENSURE** equipment and areas are secured and restored as appropriate.

12.4. **REVIEW** regulatory reporting procedure for any necessary reports.

12.5. **FORWARD** all records of completion to Security as SAFEGUARDS information until event evaluation is complete.

Attachment 25, Large Area Losses

NOTE

Bases **[B1162] [B1168]** apply to entire attachment.

A. DETERMINE IF A LARGE AREA LOSS HAS OCCURRED

NOTE

- The Shift Manager should apply situational judgment, and work with Security Shift Supervisor to determine and coordinate actions required in this attachment. The Shift Manager may deviate from this procedure to protect safety of plant personnel or health/safety of the public.
- This procedure should be used if all or a substantial portion of a large area of plant has been damaged and rendered unavailable.

1.0 **IF** an event has occurred in which a large area of plant may have been lost, **THEN ASSESS** area(s) damaged **AND** extent of damage by:

a. control board indications

b. reports from Operations personnel outside Control Room

c. reports from Security **AND** other personnel outside Control Room

1.1 **IF** assessment indicates all areas of plant remain largely intact, **THEN EXIT** this attachment.

2.0 **IF** event has not already been classified **PER** Emergency Action Levels, **THEN REFER** to CNG-EP-1.01-1013, Emergency Classification and PAR, for event classification **AND CONTINUE** with this procedure.

2.1 **IF** event has been classified **PER** Emergency Action Levels, **THEN CONTINUE** with this procedure.

Attachment 25, Large Area Losses (Continued)

A. DETERMINE IF A LARGE AREA LOSS HAS OCCURRED (Continued)

NOTE

Any firefighting/ damage control activities should be undertaken with appropriate consideration given to any existing security concerns.

3.0 **REFER** to ERPIP-3.0 Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

B. DETERMINE THE APPLICABLE SECTION

NOTE

- This attachment may be exited when deemed appropriate by Shift Manager or Emergency Director.
- Steps of this attachment may be done concurrently and may be done concurrently with actions of other implemented attachments.

1.0 **DETERMINE** affected area(s) based on information obtained in Step A.1.0 above.

Attachment 25, Large Area Losses (Continued)

B. DETERMINE THE APPLICABLE SECTION (Continued)

NOTE

If a system or component in area identified as lost is available, it may be used as appropriate.

2.0 **IMPLEMENT** section(s) of this attachment for affected area(s). [C. through U.]

C. INTAKE STRUCTURE

NOTE

The following areas may have been damaged along with Intake Structure:

- North Service Building
- Turbine Building

1.0 **Assumptions:**

a. Units 1 and 2 have a total loss of CW (although a total loss of all CW is unlikely).

b. Total loss of Saltwater.

2.0 **Both Units:**

a. **IMPLEMENT** EOPs.

b. **REFER** to AOP-7A (Loss of Saltwater) as necessary.

c. **REFER** to AOP-6F (Loss of Spent Fuel Pool Cooling), if necessary.

d. **COOLDOWN** using ADVs and AFW. Will probably only be able to cooldown to 225°F. Can **NOT** go on SDC until SDC HX is available.

Attachment 25, Large Area Losses (Continued)

C. INTAKE STRUCTURE (Continued)

e. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

f. **REFER** to SAM ERPIP-611, Attachment 1, for alternate lineups, **AND** ERPIP-604 for CHLAs addressing the loss of CNMNT cooling as needed.

g. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

D. HYDROGEN STORAGE TANKS

NOTE

The following areas may have been damaged along with Hydrogen Storage Tanks:

- Tank Farm
- Turbine Building

1.0 **Assumptions:**

a. Hydrogen Storage Tanks rupture causing a large outside fire.

b. Hydrogen is isolated to Turbine Building.

c. Unit 1 Turbine Building sustains damage to structure, but unit remains online.

d. Loss of Control Room and Heater Drain Pump Chiller Units.

e. Loss of Auxiliary Boiler capability.

f. Complete loss of all tanks in tank farm.

D. HYDROGEN STORAGE TANKS (Continued)

2.0 **Both Units:**

a. **IF** adequate inventory exists, **THEN PERFORM** a controlled shutdown/cooldown **PER** the OPs.

a.1 **IF** adequate inventory does **NOT** exist, **THEN MAINTAIN** mode 3 (as in EOP-7) until a makeup source can be aligned.

b. **SECURE** blowdown system per OI-8A to conserve inventory (consider shutting MSIVs).

c. **ENTER** Mode 4 **AND INITIATE** Shutdown cooling.

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachment 1, for alternate lineups, as necessary.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

E. UNIT 1 & UNIT 2 TURBINE BUILDING

NOTE

The Auxiliary Building may have been damaged along with U1 & U2 Turbine Building.

1.0 **Assumptions:**

a. Both Units trip or manual trip is actuated.

b. Main Feedwater is lost as well as condenser.

c. No Safe Shutdown Equipment (SSE) is affected.

Attachment 25, Large Area Losses (Continued)

E. UNIT 1 & UNIT 2 TURBINE BUILDING (Continued)

2.0 **Both Units:**

a. **IMPLEMENT** EOPs.

b. **IF** necessary,
THEN SHUT MSIVs to minimize Excess Steam Demand and Isolate Main Feed.

c. **COOLDOWN** using AFW and ADVs, until units are placed on SDC.

d. **SECURE** blowdown system per OI-8A to conserve inventory (consider shutting MSIVs).

e. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

f. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

g. **START** SWACs **AND**
REFER to AOP-7D for loss of air, as necessary.

h. **REFER** to AOP-7I for loss of busses, as necessary.

i. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

F. UNIT 1 TURBINE BUILDING

NOTE

The following areas may have been damaged along with U1 Turbine Building:

- Auxiliary Building
- Hydrogen Storage Tanks
- U2 Turbine Building

1.0.A **Unit 1 Assumptions:**

a. Unit 1 trips or manual trip is actuated.

b. Main Feedwater lost as well as condenser.

c. No Safe Shutdown Equipment (SSE) is affected.

d. Hydrogen Storage Tanks rupture, causing a large outside fire.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **IF** necessary, **THEN SHUT** MSIVs to minimize Excess Steam Demand **AND ISOLATE** Main Feed.

c. **COOLDOWN** using AFW and ADVs until units are placed on SDC.

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

F. UNIT 1 TURBINE BUILDING (Continued

f. **START** SWACs and refer to AOP-7D for loss of air, as necessary.

g. **REFER** to AOP-7I for loss of busses, as necessary.

h. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 2 Assumptions:**

a. Unit may trip on turbine malfunctions or be tripped due to loss of feed or condenser.

2.0.B **Unit 2:**

a. **IF** unit did not trip,
THEN CONSIDER IMPLEMENTING AOP-7E for Turbine Malfunctions or trip unit.

b. **PERFORM** a controlled shutdown/cooldown PER OPs, as necessary.

c. **IF** unit tripped,
OR was manually tripped,
THEN IMPLEMENT EOPs.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

e. **START** SWACs **AND**
REFER to AOP-7D for loss of air, as necessary.

f. **REFER** to AOP-7I for loss of busses, as necessary.

G. U2 TURBINE BUILDING

NOTE

The following areas may have been damaged along with U2 Turbine Building:

- Auxiliary Building
- U1 Turbine Building

1.0.A **Unit 2 Assumptions:**

a. Unit 2 trips or manual trip is actuated.

b. Main Feedwater lost as well as condenser.

c. No Safe Shutdown Equipment (SSE) is affected.

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **IF** necessary,
THEN SHUT MSIVs to minimize Excess Steam Demand and Isolate Main Feed.

c. **COOLDOWN** using AFW and ADVs, until units are placed on SDC.

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

Attachment 25, Large Area Losses (Continued)

G. U2 TURBINE BUILDING (Continue)

f. **REFER** to AOP-7I for loss of busses, as necessary.

g. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Unit may trip on Turbine Malfunctions or be tripped due to loss of feed or condenser.

2.0.B **Unit 1:**

a. **IF** unit did not trip, **THEN CONSIDER IMPLEMENTING** AOP-7E for Turbine Malfunctions or trip unit.

b. **PERFORM** a controlled shutdown/cooldown PER OPs, as necessary.

c. **IF** unit tripped, **OR** was manually tripped, **THEN IMPLEMENT** EOPs.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

e. **START** SWACs and **REFER** to AOP-7D for loss of air, as necessary.

f. **REFER** to AOP-7I for loss of busses, as necessary.

H. 21 RWT

NOTE

The following areas have been damaged along with 21 RWT:

- U2 Containment
- 21 Fuel Oil Storage Tank
- P-13000-2 Transformer
- U2 Metal Clad
- 2B DG
- RWT Pump Room

1.0.A **Unit 2 Assumptions:**

a. May trip on partial Loss of Offsite Power (P-13000-2), otherwise a shutdown or manual trip will be initiated.

b. 21 4KV Bus remains energized. 24 4KV Bus is lost.

c. 2B DG is unavailable.

d. Without 21 RWT, boration and makeup water is from 21/22 BAST and 11 DI Storage Tank.

e. Power lost to various support plant buildings.

f. U2 CNMNT has no penetrable damage.

g. U2 West Pen Room sustains structural damage only.

Attachment 25, Large Area Losses (Continued)

H. 21 RWT (Continued)

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 21 RWT and 11 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 22, 23, and 24 4KV Busses to alternate feeds PER OI-27C.

e. **REALIGN** 2B DG, if it becomes available, to 11 FOST PER OI-21D.

f. **RESTORE** station power to support buildings via the 69KV SMECO feed via OI-27B and Electrical Maintenance.

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Loss of 14 4KV Bus until picked up by 1B DG.

Attachment 25, Large Area Losses (Continued)

H. 21 RWT (Continued)

2.0.B **Unit 1:**

a. **IMPLEMENT** AOP-7I for loss of 14 4KV Bus. Unit may stay online.

b. **REALIGN** 14 4KV Bus to its alternate feed PER OI-27C.

c. **REALIGN** 1B DG to 11 FOST PER OI-21D within 2 hours, if carrying the 14 4KV Bus.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

I. U1 AUXILIARY BUILDING NORTHWEST SECTION

NOTE

The following areas may have been damaged along with U1 Auxiliary Building Northwest Section:

- 11 RWT
- U1 Containment
- 1B DG
- 2A DG

1.0.A **Unit 1 Assumptions:**

a. Without 11 RWT, boration and makeup water is from BAST and DI Storage Tank.

b. Loss of 1B DG.

c. Possible damage to 69' Electrical RM (MCCs 114, 105, 115, 102).

d. Loss of 1-2 Auxiliary Building Supply Fans. Loss of negative pressure in Spent Fuel Pool Area.

Attachment 25, Large Area Losses (Continued)

I. U1 AUXILIARY BUILDING NORTHWEST SECTION (Continued)

2.0.A **Unit 1:**

a. **IMPLEMENT** AOP-7I for loss of MCCs.

b. **IMPLEMENT** AOP-7D for loss of instrument air, as necessary.

c. **SHUTDOWN/COOLDOWN** PER OPs to Mode 5, (1 DG, 72 hour Tech Spec).

d. **IF** Reactor trips,
THEN IMPLEMENT EOPs.

e. **IMPLEMENT** applicable OI-22 series procedure for Auxiliary Building Ventilation systems.

f. **IF** RWT makeup is required,
THEN TIE 11 RWT **AND** 21 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 2 Assumptions:**

a. Unit remains online.

b. Loss of 2A DG.

2.0.B **Unit 2:**

a. **SHUTDOWN/COOLDOWN PER** OPs to Mode 5, (1 DG, 72 hour Tech Spec).

Attachment 25, Large Area Losses (Continued)

I. U1 AUXILIARY BUILDING NORTHWEST SECTION (Continued)

b. **IF** reactor trips,
THEN IMPLEMENT EOPs.

c. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary

J. U2 AUXILIARY BUILDING SOUTHWEST SECTION

NOTE

The following areas may have been damaged along with U2 Auxiliary Building Southwest Section:

- 21 RWT
- U2 Containment
- 2B DG

1.0.A **Unit 2 Assumptions:**

a. Without 21 RWT, boration and makeup water is from BAST and DI Storage Tank.

b. Loss of 2B DG.

c. Possible damage to 69' Electrical RM (MCCs 214, 205, 215, 202).

d. Possible damage to Spent Resin Metering Tank, elevating radiation doses in 45' Auxiliary Building.

e. Loss of 1-2 Auxiliary Building Supply Fans. Loss of negative pressure in Spent Fuel Pool Area.

J. U2 AUXILIARY BUILDING SOUTHWEST SECTION (Continued)

2.0.A **Unit 2:**

a. **IMPLEMENT** AOP-7I for loss of MCCs.

b. **IMPLEMENT** AOP-7D for loss of instrument air, as necessary.

c. **IF** reactor trips,
THEN IMPLEMENT EOPs.

d. **SHUTDOWN/COOLDOWN** PER OPs to Mode 5, (1 DG, 72 hour Tech Spec)

e. **IMPLEMENT** applicable OI-22 series procedure is for Auxiliary Building Ventilation systems.

f. **IF** RWT makeup is required,
THEN TIE 21 RWT **AND** 11 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, Large Area Fire Loss, as necessary.

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Unit 1 remains online.

Attachment 25, Large Area Losses (Continued)

K. U2 CONTAINMENT

NOTE

The following areas may have been damaged along with U2 Containment:

- 21 RWT
- U2 High-Side Disconnects
- 2B DG
- Auxiliary Building Roof

1.0.A **Unit 2 Assumptions:**

a. RPS trip on Loss of Load, otherwise a shutdown or manual trip will be initiated.

b. Without 21 RWT, boration and makeup water is from BAST and DI Storage Tank.

c. CNMNT is not penetrated.

d. Steamline breaks may occur.

e. 2B DG is unavailable.

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 21 RWT **AND** 11 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

K. U2 CONTAINMENT (Continued)

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Unit 1 remains online.

L. 21 FUEL OIL STORAGE TANK

NOTE

The following areas may have been damaged along with 21 Fuel Oil Storage Tank:

- 21 RWT
- P-13000-2 Transformer
- U2 Metal Clad
- U2 Containment

1.0.A **Unit 2 Assumptions:**

a. May trip on partial Loss of offsite Power (P-13000-2), otherwise a shutdown or manual trip will be initiated.

Attachment 25, Large Area Losses (Continued)

L. 21 FUEL OIL STORAGE TANK (Continued)

b. 21 4KV Bus remains energized. 24 4KV Bus is powered from 2B DG.

c. Without 21 RWT, boration and makeup water is from 21/22 BAST and 11 DI Storage Tank.

d. Power lost to various support buildings.

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 21 RWT **AND** 11 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 22, 23, and 24 4KV Busses to alternate feeds PER OI-27C.

e. **REALIGN** 2B DG to 11 FOST PER OI-21D within 2 hours, if carrying 24 4KV bus.

f. **RESTORE** station power to support buildings via 69KV SMECO feed via OI-27B and Electrical Maintenance.

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

Attachment 25, Large Area Losses (Continued)

L. 21 FUEL OIL STORAGE TANK (Continued)

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Loss of 14 4KV Bus until picked up by 1B DG.

2.0.B **Unit 1:**

a. **IMPLEMENT** AOP-7I for loss of 14 4KV Bus. Unit may stay online.

b. **REALIGN** 14 4KV Bus to its alternate feed PER OI-27C.

c. **REALIGN** 1B DG to 11 FOST **PER** OI-21D within 2 hours, if carrying 14 4KV Bus.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

e. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

M. U1 CONTAINMENT

NOTE

The following areas may have been damaged along with U 1 Containment:

- 11 RWT
- 1B DG
- 2A DG
- U1 High-Side Disconnects
- Auxiliary Building Roof

1.0.A **Unit 1 Assumptions:**

a. RPS trip on Loss of Load, otherwise a shutdown or manual trip will be initiated.

b. Without 11 RWT, boration and makeup water is from BAST and DI Storage Tank.

c. CNMNT is not penetrated.

d. Steamline breaks may occur.

e. 1B DG is unavailable.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

M. U1 CONTAINMENT (Continued)

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 11 RWT **AND** 21 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 2 Assumptions:**

a. 2A DG is unavailable. Unit 2 remains online.

Attachment 25, Large Area Losses (Continued)

N. P-13000-2 TRANSFORMER AND U2 METAL CLAD

NOTE

The following areas may have been damaged along with P-13000-2 Transformer and U2 Metal Clad:

- 21 Fuel Oil Storage Tank
- 21 RWT

1.0.A **Unit 2 Assumptions:**

a. RPS trip on partial Loss of Offsite Power (P-13000-2), otherwise a shutdown or manual trip will be initiated.

b. 21 4KV Bus remains energized. 24 4KV bus is powered from 2B DG.

c. Without 21 RWT, boration and makeup water is from 21/22 BAST and 11 DI Storage Tank.

d. Power lost to various support buildings.

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 21 RWT **AND** 11 RWT (**REFER** to ERPIP 611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 22, 23, and 24 4KV Busses to alternate feeds PER OI-27C.

e. **REALIGN** 2B DG to 11 FOST PER OI-21D within 2 hours, if carrying 24 4KV Bus.

Attachment 25, Large Area Losses (Continued)

N. P-13000-2 TRANSFORMER AND U2 METAL CLAD (Continued)

f. **RESTORE** station power to support buildings via the 69KV SMECO feed via OI-27B and Electrical Maintenance.

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Loss of 14 4KV Bus until picked up by 1B DG.

2.0.B **Unit 1:**

a. **IMPLEMENT** AOP-7I for loss of 14 4KV Bus. Unit may stay online.

b. **REALIGN** 14 4KV Bus to its alternate feed PER OI-27C.

c. **REALIGN** 1B DG to 11 FOST **PER** OI-21D within 2 hours, if carrying 14 4KV Bus.

O. P-13000-1 TRANSFORMER AND U1 METAL CLAD

NOTE

The following areas may have been damaged along with P-13000-1 Transformer and U1 Metal Clad:

- 11 Fuel Oil Storage Tank
- 11 RWT

1.0.A **Unit 1 Assumptions:**

a. RPS trip on partial Loss of Offsite Power (P-13000-1), otherwise a shutdown or manual trip will be initiated.

b. 14 4KV Bus remains energized. 11 4KV Bus is powered from 1A DG.

c. Without 11 RWT, boration and makeup water is from 11/12 BAST and 11 DI Storage Tank.

d. Power lost to various support buildings.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 11 RWT **AND** 21 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 11, 12, and 13 4KV Busses to alternate feeds PER OI-27C.

e. **REALIGN** 1B DG to 21 FOST **PER** OI-21D.

O. P-13000-1 TRANSFORMER AND U1 METAL CLAD (Continued)

f. **RESTORE** station power to support buildings via the 69KV SMECO.

g. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

h. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

i. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 2 Assumptions:**

a. Loss of 21 4KV Bus until picked up by 2A DG.

2.0.B **Unit 2:**

a **IMPLEMENT** AOP-7I for loss of 21 4KV Bus. Unit may stay online.

b. **REALIGN** 21 4KV Bus to its alternate feed PER OI-27C.

c. **REALIGN** 2A DG to 21 FOST **PER** OI-21D within 2 hours, if carrying 21 4KV Bus.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

P. U-22000-22 TRANSFORMER

NOTE

The following areas may have been damaged along with U-22000-22 Transformer:

- U-22000-21 Transformer
- U-4000-12 and 22

1.0.A **Unit 2 Assumptions:**

a. RPS trip on Loss of Load.

b. U-4000-12 and 22 are lost.

c. 21 and 24 4KV Buses deenergized until picked up by 2A and 2B DGs.

2.0.A **Unit 2:**

a. **IMPLEMENT** EOPs.

b. **REFER** to AOP-7I.

c. **COOLDOWN** to Mode 5.

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 1 Assumptions:**

a. Unit 1 remains online.

2.0.B **Unit 1:**

a. **IMPLEMENT** AOP-7 for bus losses, as necessary.

P. U-22000-22 TRANSFORMER (Continued)

b. **IF** unit trips,
THEN IMPLEMENT EOPs.

Q. U-25000-11 TRANSFORMER

NOTE

The following areas may have been damaged along with U-25000-11 Transformer:

- U-25000-12 Transformer
- U-4000-11 and 21

1.0.A **Unit 1 Assumptions:**

a. RPS trip on Loss of Load.

b. U-4000-11 and 21 are lost.

c. 11 and 14 4KV Buses deenergized until picked up by 1A and 1B DGs.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **REFER** to AOP-7I.

c. **COOLDOWN** to Mode 5.

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

f. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

Q. U-25000-11 TRANSFORMER (Continued)

1.0.B **Unit 2 Assumptions:**

a. Unit 2 remains online.

R. 11 RWT

NOTE

The following areas may have been damaged along with 11 RWT:

- P-13000-1 Transformer
- U1 Metal Clad
- U1 Containment
- 11 Fuel Oil Storage Tank
- 2A DG

1.0.A **Unit 1 Assumptions:**

a. RPS trip on Loss of Offsite Power (P-13000-1), otherwise a shutdown or manual trip will be initiated.

b. 11 4KV Bus is powered from the 1A DG. 14 4KV Bus remains energized.

c. Without 11 RWT, boration and makeup water is from 11/12 BAST and 11 DI Storage Tank.

d. Power lost to various support buildings.

e. CNMNT is not penetrated.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

Attachment 25, Large Area Losses (Continued)

R. 11 RWT (CONTINUED)

c. **IF** RWT makeup is required, **THEN TIE** 11 RWT **AND** 21 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 11, 12, and 13 4KV Busses to alternate feeds **PER** OI-27C.

e. **REALIGN** 1B DG to 21 FOST **PER** OI-21D within 2 hours, if carrying 14 4KV Bus.

f. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

g. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

1.0.B **Unit 2 Assumptions:**

a. Loss of 21 4KV Bus.

2.0.B **Unit 2:**

a. **IMPLEMENT** AOP-7I for loss of 21 4KV Bus. Unit may stay online.

b. **REALIGN** 21 4KV Bus to its alternate feed PER OI-27C.

c. **IF** 2A DG becomes available, **THEN REALIGN** to 21 FOST **PER** OI-21D.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

S. 1A AND 0C DIESEL GENERATOR BUILDINGS

1.0 **Unit 1 Assumptions:**

a. Both buildings are affected.

b. Loss of 1A DG to 11 4KV Bus.

c. Loss of 0C DG.

S. 1A AND 0C DIESEL GENERATOR BUILDINGS (CONTINUED)

2.0 **Unit 1:**

a. No EOP will be needed contingent upon no other casualties.

b. **SHUTDOWN/COOLDOWN PER** OPs (72 hour Tech Spec for 1 DG).

c. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

e. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

T. 11 FUEL OIL STORAGE TANK

NOTE

The following areas may have been damaged along with 11 Fuel Oil Storage Tank:

- 11 RWT
- P-13000-1 Transformer
- U1 Metal Clad
- U1 Containment

1.0.A **Unit 1 Assumptions:**

a. RPS trip on partial Loss of Offsite Power (P-13000-1), otherwise a shutdown or manual trip is initiated.

T. 11 FUEL OIL STORAGE TANK (Continued)

b. 14 4KV Bus remains energized. 11 4KV Bus is powered from 1A DG.

c. Without 11 RWT, boration and makeup water is from 11/12 BAST and 11 DI Storage Tank.

d. Power lost to various support buildings.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **COOLDOWN** to Mode 5.

c. **IF** RWT makeup is required, **THEN TIE** 11 RWT **AND** 21 RWT (**REFER** to ERPIP-611, Attachment 1) [Places opposite Unit in Tech. Spec].

d. **REALIGN** 11, 12, and 13 4KV Busses to alternate feeds **PER** OI-27C.

e. **RESTORE** station power to support buildings via the 69KV SMECO feed via OI-27B and Electrical Maintenance.

f. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

g. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

h. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

T. 11 FUEL OIL STORAGE TANK (Continued)

1.0.B **Unit 2 Assumptions:**

a. Loss of 21 4KV Bus until picked up by 2A DG.

2.0.B **Unit 2 Assumptions:**

a. **IMPLEMENT** AOP-7I for loss of 21 4KV Bus. Unit likely stays online.

b. **REALIGN** 21 4KV Bus to its alternate feed PER OI-27C.

c. **REALIGN** 2A DG to 21 FOST **PER** OI-21D within 2 hours, if carrying the 21 4KV Bus.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

U. TANK FARM

NOTE

The following areas may have been damaged along with Tank Farm:

- Hydrogen Storage Tanks
- U-25000-11 Transformer

1.0.A **Unit 1 Assumptions:**

a. U-25000-12, U-4000-11 and U-4000-21 are not affected.

b. RPS trip on a Loss of Load.

1.0.B **Unit 2 Assumptions:**

a. Unit 2 remains on line.

1.0.C **Both Units Assumptions:**

a. Loss of 11,12, and 21 CST.

Attachment 25, Large Area Losses (Continued)

U. TANK FARM (Continued)

b. Loss of 11 and 12 PTWST, reducing firefighting capabilities.

c. Loss of Electric and Diesel Fire Pumps. Outside fire system is used via cross connect.

d. Fire Truck(s) will be used to supplement available firefighting equipment.

e. Loss of 11 DI Storage Tank.

f. Large outside fire.

2.0.A **Unit 1:**

a. **IMPLEMENT** EOPs.

b. **IF** adequate condensate inventory exists,
THEN PERFORM a controlled shutdown/cooldown.

b.1 **IF** adequate condensate inventory does not exist,
THEN MAINTAIN Mode 3 (similar to EOP-7) until a makeup source can be aligned.

c. **SECURE** Blowdown system **PER** OI-8A to conserve inventory (consider shutting MSIVs).

d. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

e. **TIE** outside Protected Area fire system to Protected Area fire system **PER** ERPIP-611, Attachment 1.

f. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

g. **REFER** to 1C24B-ALM, Fire Systems Alarm Manual, window SP-48 for Fire System Header Rupture, as necessary.

Attachment 25, Large Area Losses (Continued)

V. AUXILIARY BUILDING ROOF

2.0.B **Unit 2:**

a. **IF** adequate condensate inventory exists,
THEN PERFORM a controlled shutdown/cooldown **PER** the OPs.

a.1 **IF** adequate condensate inventory does not exist,
THEN MAINTAIN Mode 3 (similar to EOP-7) until a makeup source can be aligned.

b. **SECURE** Blowdown system **PER** OI-8A to conserve inventory (consider shutting MSIVs).

c. **TIE** outside Protected Area fire system to Protected Area fire system PER ERPIP-611, Attachment 1.

d. **REFER** to SAM ERPIP-611, Attachments 1 and 2, for alternate lineups, as necessary.

NOTE

The following areas may have been damaged along with Auxiliary Building:

- U1 Containment
- U2 Containment
- U1 Turbine Building
- U2 Turbine Building

1.0 **Assumptions**

a. Loss of 0C DG.

b. Loss of SWGR HVAC.

c Loss of SR CR HVAC.

d. Loss of ADVs.

e. Loss of steam driven AFW exhaust.

V. AUXILIARY BUILDING ROOF (Continued)

f. Loss of SG safety relief valves.

g. 1B DG.

h. 2A DG.

i. 2B DG.

j. 1A DG bus ducts are assumed to survive.

2.0 **CONTINUE** the following actions:

a. **IF** there is no loss of offsite power, **THEN PERFORM** a controlled shutdown/cooldown **PER** the OIs.

b. **IF** switchgear ventilation is lost, **THEN IMPLPLEMENT** OI-22H.

c. **IMPLEMENT** Attachment 16, Fire in the Protected Area, ISFSI, or MPF, Attachment 24, Security, and/or ERPIP-613, CHLA Large Area Loss, as necessary.

d. **REFER** to SAM ERPIP-611, Attachment 1 and 2, for alternate lineups, as necessary.

e. **REFER** to SAM ERPIP-613 for mitigating strategies for severe fire, as necessary.

Attachment 26, Large Steam Leak

Implementation: Time: _____ Date: _____

Diverse Indications assisting diagnosis for large steam leaks

- Control board indications of unexpected Tcold lowering, unexpected loss of MW's, Tavg/Tref Alarm, High Power trip reset demand alarm, Abnormal steam generator pressure or level
- Fire alarms at 1C24B
- Loud noise in plant
- Unexpected steam plume sighted, unexpected humidity, or condensation build-up
- Multiple Control Room alarms/ indications may occur erroneously due to grounds

1.0 **TAKE IMMEDIATE ACTIONS** based on the following:

1.1. **IF** leak requires rapid isolation by shutting MSIV's to preserve personnel, or equipment safety,
THEN:

1.1.1. **TRIP** reactor.

1.1.2. **VERIFY** reactor is tripped,
THEN SHUT the MSIV's.

1.1.3. IMPLEMENT EOP-0.

1.2. **FOR** steam leaks large enough to have a significant effect on Reactor Coolant System:

1.2.1. **IF** unit is in Mode 1 or 2,
THEN IMPLEMENT AOP-7K (for steam line leak) or AOP-3G (for condensate/feed line leak) in parallel with this attachment.

NOTE

Procedure deviations may be needed to accommodate initial conditions.

1.2.2. **IF** unit is in Mode 3 or 4
AND steam leak is significant enough to cause ESFAS actuations,
THEN IMPLEMENT applicable portions of EOP-4 or EOP-8 in parallel with this attachment.

Attachment 26, Large Steam Leak (Continued)

1.2 (Continued)

1.2.3. **IF** steam leak presents imminent danger to personnel, **THEN**:

1. **DETERMINE** affected area:

___ U-1 / U-2 Turbine Bldg ___ U-1 / U-2 Aux Bldg
___ U-1 / U-2 Aux Bldg Roof ___ North Service Bldg Roof
___ Portion of Aux Bldg / Turb Bldg ___U-1 / U-2 Containment (use Attach 23)

2. **DETERMINE** egress route:

___ Normal egress routes ___ U-1 / U-2 TB East Stairwell
___ U-1/ U-2 TB West Stairwells ___ TB Central Stairwell (East or West)
___ Other: _____

NOTE

Noise from steam leak may interfere with station announcements. Alternate notifications to evacuate personnel, such as use of watchstanders to ensure area is cleared, should be considered.

3. **NOTIFY** station personnel.

a. **SOUND** Emergency Alarm for 5 seconds.

b. **ANNOUNCE** "A Steam Leak exists, all personnel evacuate (the affected area) immediately. (Give egress route). Shut all doors to (the affected area). Evacuated personnel assemble at SSB Cafeteria for accountability."

c. **REPEAT** once.

2.0 **REVIEW** EALs based on plant conditions.

2.1. **IF** an EAL is satisfied, **THEN, IN PARALLEL, IMPLEMENT** appropriate attachment based on event classification.

3.0 **TAKE ACTIONS** to protect personnel /equipment from effect of steam leak.

CAUTION

- If steam leak is isolable, then isolation should be done as soon as possible to lessen potential for catastrophic failure.
- Consideration of personnel safety when investigating and isolating steam leaks is paramount. Necessary precautions to ensure personnel are protected from steam burns (internal and external) shall be taken. Use of steam suits shall be considered.

3.1. **IF** leak source is determined and can be isolated in present plant conditions,
THEN ISOLATE steam leak as soon as possible.

3.2. **IF** leak source is determined,
BUT present plant conditions preclude immediate isolation (or the leak is unisolable),
THEN:

3.2.1. **PROMPTLY ESTABLISH** appropriate plant conditions to address leak using necessary operating procedures,

OR

3.2.2. **COMPLETE** an Operational Decision document justifying continued operation until steam leak can be isolated.

1. Inputs to Operational Decision include:

- How rapidly are characteristics of leak changing?
- Would a turbine trip potentially cause a rapid degradation of leak?
- Could steam leak become a vacuum leak after turbine shutdown?
- Is leak through a mechanical joint, a weld, or through wall?
- Is leak location stable or possible to lead to a rupture (wall thinning)?
- Does extent of condition need to be considered?

Attachment 26, Large Steam Leak (Continued)

3.2 (Continued)

3.2.3. **IF** leak source is not obvious,
THEN BEGIN investigation immediately to determine source of leak.

1. **ENSURE** input from Materials Engineering, System Engineering, and Design Engineering is solicited.

2. **DEVELOP** a systematic approach using plant data **AND** on scene search methods to narrow potential leakage locations.

3.3. **ESTABLISH** barriers/hazard flagging to ensure personnel stay clear of affected area.

3.3.1. **CONSIDER** potential for rapid failure at leak station when establishing protective boundaries.

3.4. **ENSURE** watertight doors are shut to protect threatened AFW pump or SRW pump rooms.

4.0 **PERFORM** personnel accountability.

4.1. **IF** an evacuation of an area was performed,
THEN PERFORM accountability of affected personnel.

NOTE

The evacuated people should be assembled at SSB cafeteria.

4.1.1. **ENSURE** appropriate supervision responds to cafeteria to establish accountability for evacuated personnel.

4.1.2. **HAVE** responding supervision report results to Control Room (or other central location designated by Shift Manager). Any discrepancies in accountability need to be promptly addressed.

Attachment 26, Large Steam Leak (Continued)

5.0 **MONITOR** steam leak status.

5.1. **PROVIDE** updates to the station as appropriate on event status.

5.1.1. **CONSIDER** periodic announcements to maintain personnel clear of the affected area.

NOTE
Use of cameras is particularly effective as a means to monitor a steam leak.

5.1.2. **ESTABLISH** means to monitor steam leak until it is isolated or repaired.

6.0 **TERMINATE** event, as follows:

6.1. **WHEN** steam leak conditions have been properly addressed, **THEN ANNOUNCE** "Now secure from the steam leak. Now secure from the steam leak."

6.2. **CONDUCT** area walk downs for damage as determined appropriate by Shift Manager.

6.3. **ENSURE** barriers installed, equipment operated, areas secured, equipment staged as part of steam leak response are restored as appropriate.

Termination: Time: _____ **Date:** _____

Attachment 27, Extensive Damage Mitigation Guidelines

NOTE

- Basis **[B2345]** applies to entire attachment.
- The highest ranking Licensed Operator survivor should apply situational judgment, and work with highest ranking Nuclear Security Officer Survivor to determine and coordinate actions required in this attachment. The highest ranking Licensed Operator survivor shall assume position of Operator In Charge and may deviate from this procedure to protect safety of Plant Personnel or health/safety of the public. In the event that no Licensed Operators survive, then highest ranking Auxiliary Operator shall assume position of Operator In Charge.

A. ASSESS THE EMERGENCY

NOTE

- This attachment assumes an event beyond design basis has occurred in which plant equipment may be extensively damaged, monitoring plant conditions may not be possible, access to plant equipment may be severely restricted, and all AC and DC power required for operation of plant systems may be lost.
- This attachment is implemented **PER** 10 CFR 50.54(x).

1.0 **IF** either of the following conditions exist,
THEN GO TO Secondary Fire Brigade Locker **AND ASSUME** command of station as Operator In Charge:

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

A. ASSESS THE EMERGENCY (Continued)

- Control Room command and control functions and personnel are lost as a result of hostile actions against the Control Room or Auxiliary Building such that control of plant equipment cannot be established from Control Room or Remote Shutdown Panel.
- A General Emergency for EAL HG4.1 (an adversary has taken control of facility such that plant personnel are unable to operate equipment required to maintain safety functions acceptance criteria, Table A.6-3) exists under Security Threat **PER** Emergency Action Level Documents (EAL-TB, EAL-HOT, EAL-COLD).

2.0 **CLASSIFY** event as a General Emergency, EAL number HG4.1 **PER** Emergency Action Level Documents (EAL-TB, EAL-HOT, EAL-COLD).

B. RE-ESTABLISH COMMAND AND CONTROL

NOTE

- Phones and computers are available in Security Muster Room and Security Shift Supervisors Office.
- Radios are available in Secondary Fire Brigade Locker.
- Procedures are available in Simulator.

1.0 **EVALUATE** communications capability for directing onsite response.

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

B. RE-ESTABLISH COMMAND AND CONTROL (Continued)

a. Plant Page System

b. Normal Phone System

c. 800 Mhz Radio System

d. Personal Mobile Phones

e. Alpha-Numeric Pagers

f. E-mail

g. Runners to onsite locations

2.0 **DIRECT** ERO activation **AND** offsite notification.

a. **PHONE** X5222 **OR**
GO TO Security Access Control Station.

b. **TELL** Nuclear Security Officer that a General Emergency Exists.

c. **DIRECT** Nuclear Security Officer to implement EP-AA-112-100-F-51, Shift Communicator Checklist.

d. **DIRECT** Nuclear Security Officer to recall ERO to Alternative Emergency Response Facilities using any of the following:

- Emergency Response Organization Notification System (ERONS)
- Call Tree using any available phones
- Runner to offsite location

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

B. RE-ESTABLISH COMMAND AND CONTROL (Continued)

e. **DIRECT** Nuclear Security Officer to summon offsite assistance using any of the following:

- Dedicated Offsite Phone
- Normal Phone System
- 800 Mhz Radio System
- Personal Mobile Phones
- Alpha-Numeric Pagers
- E-mail
- Runners to offsite Locations

3.0 **IF** plant page is operable, **THEN ASSEMBLE** surviving Operators.

a. **NOTIFY** Plant Personnel by performing the following:

(1) **ANNOUNCE**: "Attention Operations Personnel. Assemble at the Nuclear Security Facility Secondary Fire Brigade Locker."

(2). **REPEAT** above notification.

3.1 **IF** plant page is not operable, **THEN ASSEMBLE** surviving Operators **AND NOTIFY** Plant Personnel **BY USING** any available means.

- Normal Phone System
- 800 Mhz Radio Systems
- Personal Mobile Phones
- Alpha-Numeric Pagers
- E-mail
- Runners to onsite locations

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

B. RE-ESTABLISH COMMAND AND CONTROL (Continued)

4.0 **ESTABLISH** command structure.

a. **ASSUME** command and control as Operator In Charge.

b. **IDENTIFY** Nuclear Security Officer In Charge.

c. **IDENTIFY** Fire Brigade Member In Charge.

d. **DIRECT** Fire Brigade Member In Charge **TO ASSUME** Incident Command.

e. **IF** plant page is operable, **THEN NOTIFY** Plant Personnel **BY PERFORMING** the following:

(1). **ANNOUNCE:** "Attention Plant Personnel.

_____

has assumed command as Operator In Charge."

(2). **REPEAT** above notification.

e.1 **IF** plant page is not operable, **THEN NOTIFY** Plant Personnel **BY USING** any available means.

- Normal Phone System
- 800 Mhz Radio System
- Personal Mobile Phones
- Alpha-Numeric Pagers
- E-mail
- Runners to onsite locations

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

C. NOTIFY PLANT PERSONNEL OF SECURITY THREAT AS APPROPRIATE TO THE SITUATION – SECURE THE STATION

NOTE

- Any plant announcement should be coordinated with Nuclear Security Officer In Charge to evaluate best response in considering personnel safety.
- This section assumes Plant Page system is in service but not Plant Emergency Alarm.

1.0 **IF** it is deemed that Plant Personnel should *remain where they are*, **THEN NOTIFY** Plant Personnel **BY PERFORMING** the following:

a. **ANNOUNCE**: "Attention all Plant Personnel. The Station is under attack. Take cover immediately."

1.1 **IF** it is deemed that Plant Personnel should *evacuate* the Protected Area, **THEN NOTIFY** Plant Personnel **BY PERFORMING** the following:

WARNING

Take into consideration the nature of the emergency in determining if people can be assembled and accounted for in normal NOF assembly area. Give directions for alternate assembly location as situation requires.

a.1 **ANNOUNCE**: "Attention all Plant Personnel, a security threat exists. Evacuate to the NOF.
Report suspicious activities or persons to Nuclear Security on extension 911."

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

C. NOTIFY PLANT PERSONNEL OF SECURITY THREAT AS APPROPRIATE TO THE SITUATION – SECURE THE STATION (Continued)

b. **REPEAT** above notification once.

b.1 **REPEAT** above notification once.

D. IMPLEMENT INITIAL OPERATIONAL ACTIONS

NOTE

- Before dispatching personnel into plant, the Operator in Charge shall evaluate if a Security Escort is required.
- Procedures are available in Operational Support Center and Simulator.

1.0 **CONSIDER** performing the following actions as time allows at discretion of Operator In Charge:

a. **ENSURE** both reactors are shutdown:

- **OPEN** reactor trip breakers.
- **OPEN** MG set output contacts.

b. **MANUALLY TRIP** both main turbines.

D. IMPLEMENT INITIAL OPERATIONAL ACTIONS (Continued)

NOTE

Pressure can be read at local gages. Pressure to AFW Pumps with Steam Supply Valves open is equivalent to S/G pressure.

c. **VERIFY** a turbine driven AFW Pump is running locally **PER** EOP-8, HR-1, block step alternate action D.6.c.1.(1) through D.6.c.1.(8).

d. **OPERATE** ADVs locally to maintain S/G pressure within 25 psi of current pressure by local operation of the ADVs.

NOTE

Steam Train FCVs fail open on loss of power.

e. **THROTTLE** pump discharge valve:

- 1(2)-AFW-103
- 1(2)-AFW-117

AND/OR

ADJUST pump speed locally **TO MAINTAIN** S/G level between minus170 inches and plus 30 inches:

Attachment 27, Extensive Damage Mitigation Guidelines (Continued)

D. IMPLEMENT INITIAL OPERATIONAL ACTIONS (Continued)

f. **IF** individual S/G level needs to be adjusted,
THEN THROTTLE individual S/G AFW Stop Valves located in 27' East Penetration Room.

- 11(21) S/G 1(2)-AFW-162
- 12(22) S/G 1(2)-AFW-164

g. **MAINTAIN** AFW suction supplies and **MAXIMIZE** CST inventories **PER** EOP Attachments, Attachment 8, Maintain AFW Pump Suction Supply and CST Inventory.

h. **ISOLATE** blowdown locally.

i. **MONITOR** S/G levels **PER** Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation.

2.0 **UPDATE** Technical Support Center and Operational Support Center Staff on actions taken. Include status of reactor trip, main turbine trip, AFW operation, and ADV operation.

E. EVALUATE MAJOR EQUIPMENT STATUS

1.0 **IF** event has caused large losses of equipment,
THEN EVALUATE Attachment 25, Large Area Losses, **AND REPORT** assessment to Technical Support Center when it is activated.

F. EVENT TERMINATION

WARNING

The post-event communication of threat information should be held as SAFEGUARDS until determined otherwise.

1.0 **EXIT** this attachment when directed by Technical Support Center.

2.0 **FORWARD** all records of implementation to Security as SAFEGUARDS information until event evaluation is complete.

Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation

NOTE

- Basis **[B2345]** applies to entire procedure.
- Typical location for equipment (list below) used to monitor S/G level locally is available in the NSF Secondary fire Brigade Locker (primary response kit), OTF Instrument and Electrical Labs (alternate supplies), SSB Instrument and Electrical Shops (alternate supplies), and Warehouse (6 V batteries Mech #95G79):
  - Flashlights
  - DRUCK UPS 111 Loop Calibrator
  - Leads for voltmeter (Banana plug to alligator clip)
  - Extra AA batteries
  - 1 Large Flathead Screwdriver for removing cover screws
  - 1 Small Flathead Screwdriver for barrel nut removal
- Refer to photos on pages 6 and 7 to locate position of terminals.
- The DRUCK needs to be turned off after taking a reading. Battery life could be as short as 30 minutes if the DRUCK is continuously energized.

1.0 **IF** obtaining 11 s/g level in 45' west electrical penetration room using 1lt1114c, **THEN:**

1.1. **REMOVE** left cover from penetration 1ZWE3.

1.2. **LIFT** black and white wires of cable # ZF1L114CB at Terminal 11B-1 and 11B-2.

1.3. **CONNECT** a DRUCK Loop Calibrator, as follows:

Plus (+) lead to Terminal 11B-1

Negative (-) lead to Terminal 11B-2

1.4. **CONNECT** + lead to DRUCK red plug labeled MA.

1.5. **CONNECT** – lead to DRUCK black plug labeled COM.

1.6. **TURN ON** DRUCK.

Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation (Continued)

1.7. **PRESS** Mode Button.

1.8. **SELECT** MA measure & 24v.

1.9. **PRESS** <F2> to Enter.

1.10. **READ** current.

1.11. **USE** either supplied chart **OR CONVERT** current to S/G level, as follows:

(mADC – 4) x 29.03) – 401 = inches of level

1.11.1. **IF** obtaining 12 S/G level using 1LT1124C,
THEN:

1. **REMOVE** left cover from penetration 1ZWE3.

2. **LIFT** black and white wires of cable # ZF1L124CB at Terminal 11B-4 and 11B-5.

3. **CONNECT** a DRUCK Loop Calibrator, as follows:

   Plus (+) lead to Terminal 11B-4

   Negative (-) lead to Terminal 11B-5

4. **CONNECT** + lead to DRUCK red plug labeled MA.

5. **CONNECT** – lead to DRUCK black plug labeled COM.

6. **TURN ON** DRUCK.

7. **PRESS** Mode Button.

8. **SELECT** MA measure & 24v.

9. **PRESS** <F2> to Enter.

10. **READ** current.

11. **USE** either supplied chart **OR CONVERT** current to S/G level, as follows:

    (mADC – 4) x 29.03) – 401 = inches of level

1.11.2. **IF** obtaining 21 S/G level in 45' West Electrical Penetration Room using 2LT1114C,
THEN:

1. **REMOVE** left cover from penetration 2ZWE3.

2. **LIFT** black and white wires of cable # ZF2L114CB at Terminal 11B-1 and 11B-2.

3. **CONNECT** a DRUCK Loop Calibrator, as follows:

   Plus (+) lead to Terminal 11B-1

   Negative (-) lead to Terminal 11B-2

4. **CONNECT** + lead to DRUCK red plug labeled MA.

5. **CONNECT** – lead to DRUCK black plug labeled COM.

6. **TURN ON** DRUCK.

7. **PRESS** Mode Button.

8. **SELECT** MA measure & 24v.

9. **PRESS** <F2> to Enter.

10. **READ** current.

11. **USE** either supplied chart **OR CONVERT** current to S/G level, as follows:

    (mADC – 4) x 29.03) – 401 = inches of level

1.11.3. **IF** obtaining 22 S/G level in 45' West Electrical Penetration Room using 2LT1124C, **THEN**:

1. **REMOVE** left cover from penetration 2ZWE3.

2. **LIFT** black and white wires of cable # ZF2L124CB at Terminal 11B-4 and 11B-5.

3. **CONNECT** a 24 VDC voltage source, as follows:

   Plus (+) lead to Terminal 11B-4

   Negative (-) lead to Terminal 11B-5

Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation (Continued)

1.11.3 (Continued)

4. **CONNECT** + lead to DRUCK red plug labeled MA.

5. **CONNECT** – lead to DRUCK black plug labeled COM.

6. **TURN ON** DRUCK.

7. **PRESS** Mode Button.

8. **SELECT** mA measure & 24v.

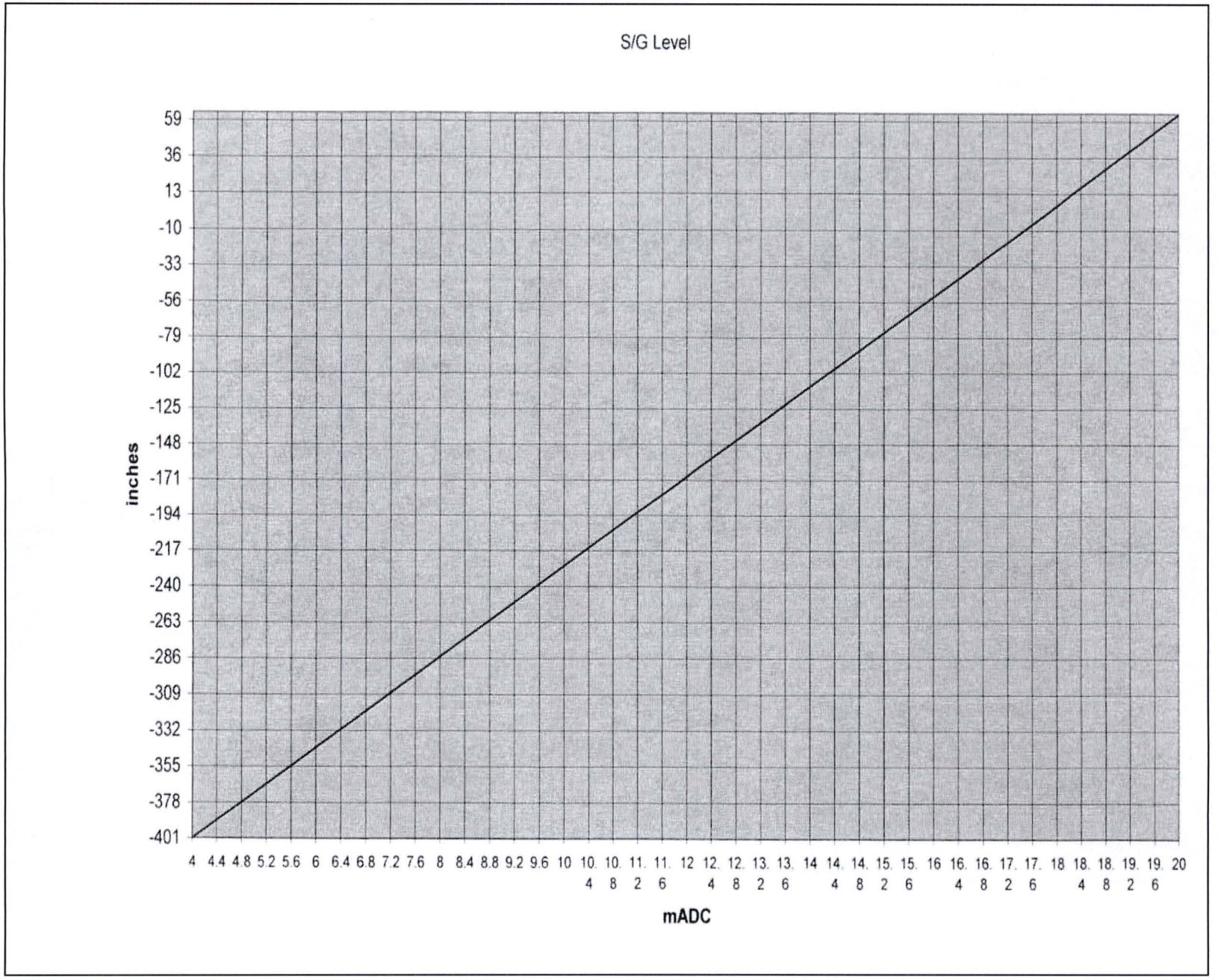
9. **PRESS** <F2> to Enter.

10. **READ** current.

11. **USE** either supplied chart **OR CONVERT** current to S/G level, as follows:

    (mADC – 4) x 29.03) – 401 = inches of level

Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation (Continued)



Attachment 28, S/G Level Monitoring During Extensive Damage Mitigation (Continued)