

Connecticut Yankee Atomic Power Company

Date of Distribution: 1-21-11

Notice of Receipt of ISFSI Emergency Operating Procedures

Change No.: 11-01

To: Document Control Desk (code Z)
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Please revise your controlled copy per instructions below:

INSERT: Index page 1 of 1 dated 1/21/11
EO-5 Rev. 6 effective 1/21/11

ATTACH:

REMOVE:

REPLACE

This acknowledges receipt of the revisions listed above. In addition, all superseded pages have been removed and destroyed.

Signature: _____ Date: _____

Please Return This Sheet to the Administrative Office, Connecticut Yankee Within Thirty (30) Days.

A002
NRR

ISFSI Master Document Index (MDI)

Emergency Operating Procedures (EO series)

1-21-11

No.	Rev.	Title	50.59	72.48	ISR	QA	RP	Review Date	Effective Date
<u>EO-1</u>	7	Emergency Planning Administration	No	No	No	Yes	Yes	08-17-10	08-26-10
<u>EO-2</u>	3	Response to Off-Normal Operations	Yes	Yes	Yes	No	Yes	08-16-10	08-20-10
<u>EO-3</u>	3	Response to Accidents	Yes	Yes	Yes	No	Yes	08-17-10	08-20-10
<u>EO-4</u>	3	Response to Natural Phenomena	Yes	Yes	Yes	No	Yes	08-17-10	08-20-10
<u>EO-5</u>	6	Emergency Plan Implementation	No	No	Yes	No	Yes	12-22-10	01-21-11
<u>EO-6</u>	11	Non-Emergency Event Assessment	No	No	Yes	No	No	08-22-10	08-26-10

ATTACHMENT B
CONNECTICUT YANKEE ATOMIC POWER COMPANY
ISFSI PROCEDURE

Emergency Plan Implementation
EO-5
Rev. 6

Preparer: *Michael B. Blum* Date: 12/22/10

10CFR50.59 / 10CFR72.48 ASSESSMENT		
10CFR50.59 SCREEN REQUIRED?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
10CFR50.59 EVALUATION REQUIRED (NO. _____)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
10CFR72.48 SCREEN REQUIRED?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
10CFR72.48 EVALUATION REQUIRED (NO. _____)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

REVIEWER SECTION	
QUALITY ASSURANCE REVIEW: SIGNATURE <u><i>NA</i></u> DATE: <u>NA</u>	
RADIATION PROTECTION REVIEW: SIGNATURE <u><i>John G...</i></u> DATE: <u>1/18/11</u>	
TECHNICAL REVIEW: SIGNATURE <u><i>John B...</i></u> DATE: <u>12/22/10</u>	
INDEPENDENT SAFETY REVIEW: (As Applicable)	
SIGNATURE: <u><i>Chris Fowler</i></u> DATE: <u>12-24-10</u>	

APPROVAL SECTION
ISFSI MANAGER/DESIGNEE SIGNATURE/DATE: <u><i>[Signature]</i></u> <u>1/19/2011</u>

Emergency Plan Implementation

1.0 PURPOSE

This procedure provides the detailed guidance for the implementation of the CY Emergency Plan.

2.0 SCOPE

The scope of this procedure is to provide for the implementation of the CY Emergency Plan in response to declared Unusual Events at the ISFSI.

3.0 DEFINITIONS

3.1 Emergency Response Organization (ERO) – consists of on-shift personnel at the CY ISFSI and other personnel who are called in as needed to respond to declared emergencies. The ERO, and the administrative measures to establish and maintain the emergency response capability, are described in ISFSI procedure EO-1.

3.2 Incident – the occurrence of a potentially serious event that requires timely assessment and an appropriate timely response. Based on the assessment, notification to state and NRC officials may be required, and a response by the Emergency Response Organization may be required.

4.0 REFERENCES

4.1 Connecticut Yankee Emergency Plan

4.2 Code of Federal Regulations, 10CFR50, Appendix E

4.3 Code of Federal Regulations, 10CFR50.54(x)

4.4 Code of Federal Regulations, 10CFR50.47(b)(8)

4.5 Quality Assurance Program (QAP)

4.6 AD-16, "ISFSI Personnel Training and Qualification Program"

4.7 EO-1, "Emergency Planning Administration"

4.8 EO-2, "Response to Off-Normal Operations"

4.9 EO-3, "Response to Accidents"

4.10 EO-4, "Responses to Natural Phenomena"

4.11 EO-6, "Non-Emergency Event Assessment"

5.0 RESPONSIBILITIES

5.1 The ISFSI Manager has the overall responsibility for the implementation of the Emergency Plan as follows:

5.1.1 Ensure the station is prepared, at all times, to activate the CY Emergency Plan and implementing procedures and staff the ERO.

5.1.2 Assist the ISS/ED during the implementation of the Emergency Plan as requested.

5.1.3 Notify the off-site local agencies of changes to site access requirements.

5.2 The designated ISFSI Shift Supervisor (ISS) assumes command of the ERO during an emergency response, becomes the Emergency Director (ED). The ISS/ED is responsible for performing the actions specified for the ISS/ED in this procedure, including the following:

5.2.1 Perform the initial and ongoing assessment and notifications related to an incident at the ISFSI.

5.2.2 For all incidents, responsibilities include assuming command and control of the ERO and contacting additional personnel as needed.

5.2.3 The following ISS/ED actions cannot be delegated:

- a. Classification of incident and subsequent changes of classification.
- b. Notification of Emergency Response Organization personnel, NRC and CT State officials.
- c. Ordering of personnel evacuation and relocation.
- d. Authorization of radiation exposure in excess of 10 CFR 20 limits.

5.3 ERO staff shall be responsible for performing actions as directed by the ISS/ED.

- 5.4 The ISFSI Security Force reports to the ISS/ED and is responsible for maintaining facility security in accordance with the Security Plan during an Unusual Event, and for the following:
- a. Providing accountability of personnel at the ISFSI.
 - b. Ensuring/facilitating the evacuation and relocation of site personnel as directed by the ISS/ED.
- 5.5 Other ISFSI personnel that are available are responsible for: conducting initial actions to bring the facility to a stable condition, including any necessary corrective actions or on-site protective actions; dose assessments; first aid; and limited fire fighting, as directed by the ISS/ED.
- 5.6 State and Local Government Response - There is no response required. Government response is expected to be limited to recording the notification of the emergency, periodically receiving updated information on the emergency, and coordinating public information news releases, if any. Upon request, local government agencies (i.e., fire companies, police, and ambulances) will respond to the ISFSI in the event of an emergency. If required, provisions exist for the State of Connecticut to halt traffic on the roads leading to the site. The ISS/ED has the authority to request such support if it is needed. CTDEP personnel might respond by coming to the site.
- 5.7 Other Organizations Providing Assistance - Assistance from other commercial companies/agencies may be required. Letters of agreement have been developed to describe outside company and agency assistance and services, and are kept current to reaffirm assistance. The letters of agreement are listed in the Emergency Plan, Appendix B.

NOTE

10CFR50.54(x) and 10CFR72.32(d) state, "A licensee may take reasonable action that departs from a license condition or a technical specification (contained in a license issued under this part) in an emergency when this action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent."

The Security Plan is a license condition and 50.54(x) and 72.32(d) are therefore applicable to the ISFSI, although it is unlikely that it will ever need to be used.

6.0 PROCEDURE

- 6.1 Immediate actions to protect personnel and mitigate the consequences of an incident (all actions are performed by the ISFSI Shift Supervisor unless otherwise noted):

- 6.1.1 Upon being notified of an incident, dispatch personnel to assess ISFSI conditions and initiate any applicable normal, abnormal and emergency procedures as necessary to mitigate ISFSI degradation, protect personnel, apply any security/operational compensatory measures and stabilize the situation, subject to the Attachment 4 guidance.
- 6.1.2 Isolate the affected area and control access to the area as appropriate.
- 6.1.3 If the office of the ISS/ED at the ISFSI remains safe, control the operations from there. If it is unsafe, relocate to an alternate location and resume control of the incident from there.
- 6.1.4 Initiate personnel evacuation and accountability per Attachment 5, if appropriate, in the following cases:
 - a. In the event of near-site release of toxic or flammable gases that may threaten any personnel at site. In this case, the notification to evacuate might come from an outside agency such as the Haddam Neck Fire Department.
 - b. In the event of any condition that, in the judgment of the ISS/ED, indicates potential degradation in the level of safety to personnel, those personnel shall be subject to immediate evacuation and relocation accordingly.
- 6.1.5 Based on the nature of the incident, and the personnel available, decide whether or not to call additional personnel to respond to the incident. If the decision is made to call in additional people, continue following this procedure, and in parallel, also perform the following:

NOTE

Emergency Response Organization-shift personnel are responsible for implementing the Emergency Plan and can do so without assistance from others. If assistance is desired, additional personnel may be called at the discretion of the ISS/ED to augment the on-shift organization. Security personnel are trained and are expected to respond within two hours from the time they are contacted.

Support staff and contractor personnel are called in, based on the need for specific expertise. This need is expected to exist later on in the incident and is not needed in support of the Emergency Plan. Their response time is dependent on their individual availability.

- a. Ensure the ERO members of the type and in the quantity necessary to facilitate the required response are contacted and are mobilized to the required location at site.

- b. Ensure the respondents are fit for duty by obtaining the desired response to all of the following questions:
 1. Are you available and willing to perform unscheduled work?
 2. Have you taken any medication or drugs, or consumed alcohol, which might affect your ability to perform assigned duties?
 3. Have you consumed any alcoholic beverages within the past five (5) hours?
 4. Do you feel fit to perform your assigned duties?
 - c. Continue contacting until an adequate response of confirmed, fit respondents is mobilized.
 - d. Upon the arrival of additional ERO personnel, assure they are adequately briefed on events that occurred, abnormal conditions that exist, and the actions they are required to perform.
- 6.2 Incident assessment and response (all actions are by the ISFSI Shift Supervisor unless otherwise noted):
- 6.2.1 Classify the event in accordance with Attachment 1 (this may be done any time enough assessment information is obtained to make the determination) as follows:
 - a. If the incident DOES NOT fit into one of the Unusual Event categories, go to ISFSI Procedure EO-6 for Non-Emergency Event Assessment.
 - b. If the incident DOES fit into one of the Unusual Event categories, continue in this procedure. The ISS now becomes the ED.

NOTE

Government agencies shall be notified within one hour of declaration of Unusual Event.

- 6.2.2 Notify the ISFSI Manager (or designee) of the nature and location of the emergency, as necessary.
- 6.2.3 All requests for public information shall be forwarded to the ISFSI Manager (or designee).

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- 6.2.4 The ISS/ED shall notify all personnel that an Unusual Event is in progress, and describe the conditions and the affected area and direct that personnel stay clear of the affected area.
- 6.2.5 Notify the government agencies of the Unusual Event using Attachment 2 within one hour after the emergency has been classified as an Unusual Event. If, when notifying the agencies within the one hour, the initiating event has already been terminated, you may tell the agency that, "the event has been terminated."
- 6.2.6 Periodically review the Attachment 3 ISS/ED Repetitive Actions Checklist.
- 6.2.7 If personnel are not accounted for, or if anyone is reported missing, initiate search and rescue efforts as a top priority as follows:
- a. Request Security conduct search using any available means.
 - b. If necessary, perform a search using selected ERO personnel as a designated Search and Rescue team.
 - c. Search and Rescue teams should be deployed in a timely manner.
 - d. Search and Rescue teams shall be adequately briefed, with a designated leader and lines of communication established as appropriate.
 - e. Search and Rescue teams shall be equipped with reliable communication devices and any anticipated rescue equipment as appropriate.
 - f. A Search and Rescue team should be used in accordance with an appropriate search plan, based on the use of site drawings and other technical information as applicable.
- 6.2.8 Dispatch personnel to conduct a radiation dose rate survey in the area of the incident, if and when appropriate. This data may be documented on field survey notes, and/or transmitted verbally to the ISS/ED (or designee), who in this case shall note the information for future reference.
- 6.2.9 Assess the radiological conditions, and consider this data when planning the actions required in response to the incident, using the Attachment 4 guidelines.

- 6.2.10 Ensure important data/information concerning the status of the ISFSI and the radiological conditions are provided (as requested by the NRC) to the NRC Headquarters Emergency Operations Center, Rockville, MD., and the NRC Region 1 Emergency Response Center. Hardcopy data shall be provided as requested by the NRC.
- 6.2.11 Record all significant events in the ISFSI Log. This includes recording significant details of any conversations with government agencies.
- 6.2.12 Keep informed as to the status of the assessment, repair, and mitigation tasks related to the incident, and continue to coordinate those activities as required.
- 6.2.13 Continuously evaluate changing ISFSI conditions to ensure that the appropriate Attachment 1 classification is in effect, and reclassify the incident as required.
- 6.2.14 Ensure updated notifications of the initial classification are sent, as applicable. Note these in the ISFSI SAS Logbook and ISS Logbook.
- 6.2.15 Continue to perform the actions of the ISS/ED Repetitive Actions Checklist, Attachment 3.
- 6.3 Ensure termination and transition to recovery operation mode is accomplished as follows (all actions are by the ISFSI Shift Supervisor unless otherwise noted):
- 6.3.1 Work with the ISFSI Manager or his designee to prepare an Attachment 6 Recovery Plan and obtain the approval of the ISFSI Manager (or designee).
- 6.3.2 Using Attachment 6 as guidance, terminate the incident and begin executing the approved Recovery Plan.
-
- 6.3.3 Notify all personnel that the Drill/Emergency was terminated at XXXX hours.
- 6.3.4 Notify the NRC, State DEMHS and DEP officials of the intent to terminate, and to go into a Recovery Plan, in accordance with Attachment 6. Contact each by phone and state the following:
- a. "This is the ISS-ED of Connecticut Yankee in Haddam Neck, CT. We have terminated the drill/emergency at XXXX hours. I repeat, this is Connecticut Yankee in Haddam Neck, CT. We have terminated the drill/emergency at XXXX hours."
- 6.3.5 Complete the Recovery Plan and notify the ISFSI Manager (or designee) when complete.

- 6.3.6 Retain the completed Recovery Plan and enter it into the Nuclear Plant Records system.

7.0 SUMMARY OF CHANGES

- 7.1 Removed NRC Names and Phone Numbers on Attachment 7 (page 5 of 11)
- 7.2 Deleted secondary cell phone numbers for State of CT Radiation Control Division Attachment 7 (Page 7 of 11)
- 7.3 Noted calls made after 4:15pm roll over to NRC OPS Center Attachment 7 (page 5 of 11)
- 7.4 Removed contact names and numbers for NAC International Attachment 7 (page 4 of 1)
- 7.5 ISS Home Phone number change Attachment 7 (page 2 of 11)

8.0 ATTACHMENTS

- 8.1 Attachment 1 - Emergency Action Levels (EALs)
- 8.2 ~~Attachment 2 - Notification Guidance and Form~~
- 8.3 Attachment 3 – ISS/ED Repetitive Actions Checklist
- 8.4 Attachment 4 - Personnel Exposure Guidelines
- 8.5 Attachment 5 - Personnel Evacuation and Accountability
- 8.6 Attachment 6 - Unusual Event Termination and Recovery
- 8.7 Attachment 7 – ERO Information and Resources

Attachment 1
Emergency Action Levels (EALs)
(Page 1 of 1)

Initiating Conditions	Emergency Action Level	NRC Emergency Classification Level	CT State Posture Code
HU1 DAMAGE TO A LOADED CASK CONFINEMENT BOUNDARY	1. Natural Phenomena Event Adversely Affecting a Loaded Cask Confinement Boundary 2. Accident Condition Adversely Affecting a Loaded Cask Confinement Boundary 3. Any Condition in the opinion of the Emergency Director that indicates loss of Loaded Fuel Storage Cask Confinement Boundary.	UNUSUAL EVENT	DELTA ONE
HU2 SECURITY EVENT WITH POTENTIAL LOSS OF LEVEL OF SAFETY TO THE ISFSI	Security Event at the ISFSI That Results in the necessity to request LLEA to respond to the ISFSI emergency	UNUSUAL EVENT	DELTA ONE

NOTE

DELTA ONE does not include a release of Radioactive Material.

Attachment 2
Notification Guidance and Form

(Complete prior to calling; read this information when calling)
(Page 1 of 2)

RECORD and READ the following announcement (speak slowly and distinctly):

- This is the ISFSI Shift Supervisor at Connecticut Yankee in Haddam Neck, CT.
- This is (pick one): _____ a drill _____ an actual incident.

INITIAL NOTIFICATION:

- An **Unusual Event**, posture code **Delta One** has been declared based on (Event description):

THE EVENT WAS CLASSIFIED ON: (date) _____ at (hrs) _____, and is being reported on (date) _____ at (hrs) _____. (elapsed time = _____ hr - If reporting time is not met, issue a Condition Report.)

THE EVENT INVOLVES:

_____ no release of radioactivity _____ potential release of radioactivity
 _____ ongoing release of radioactivity _____ terminated release of radioactivity

Note: Obtain the meteorological information from on-line (internet) resources.

- Current site wind at _____ hours, wind at the site is from _____ at _____ mph.
- I repeat, this is Connecticut Yankee in Haddam Neck, CT. This is (pick one): _____ a drill, _____ an actual incident.

For follow up questions regarding this matter please call:

_____ at _____
Name Phone Number

Time: _____ Date: _____ ISS/ED Initials: _____

NRC Event # _____

Attachment 2
Notification Guidance and Form
(Page 2 of 2)

- 1) Notify the **DEMHS** (Department of Emergency Management and Homeland Security) within one hour of the classification by dialing (860) 685-8190 (24 hour duty).
a. Identify yourself.
b. Read the information below to the Officer on Duty.

(Time Called)_____
(Date Called)_____
(Initials)

- 2) Notify the **Connecticut DEP** within one hour of classification by dialing 860-424-3333 (24 hour duty desk).
a. Identify yourself and request the person to obtain the form for Connecticut Yankee events.
b. Read the information below to the DEP Communication Officer (CO).

(Time Called)_____
(Date Called)_____
(Initials)

- 3) NRC Notification:

Complete the information on the previous page (page 1 of this Attachment). Then call the ENS-and relay the information verbally. Then fax the completed page 1 of this Attachment to the NRC Operations Center.

Emergency Notification System (ENS) OR
Health Physics Network (HPN)
to NRC Operations Center and

(301) 816-5100 (primary) or (800) 532-3469
(301) 951-0550 (First backup)

or

(800) 449-3649

Commercial Telephone System to
NRC Operations Center

(301) 415-0550 (Second Backup)
(301) 415-0553 (Third Backup)

(301) 816-5151 (FAX)

NRC Region One Office

(610) 337-5000
(610) 337-5324 (FAX) Main
(610) 337-5368 (FAX) Aux. Main
(610) 337-5349 (FAX) Div. Reactor Proj.

(Time Called)_____
(Date Called)_____
(Initials)

Attachment 3
ISS/ED Repetitive Actions Checklist
(Page 1 of 1)

ALL CHECKLIST ACTIONS SHOULD BE CHECKED OFF (✓) (ANSWERED IN THE AFFIRMATIVE) OR MARKED AS NOT APPLICABLE (N/A) TO VERIFY THAT ACTION HAS BEEN TAKEN OR IS NOT REQUIRED TO BE TAKEN FOR THE EVENT.

1. _____ Continuously evaluate changing ISFSI conditions to ensure that the appropriate EAL and classification are selected.
 - Refer to Attachment 1: Emergency Action Levels (EALs).
2. _____ If relocation has not been conducted and conditions now warrant relocation, refer to Attachment 5 and proceed with evacuation and relocation of personnel.
 - Notify ISFSI Manager (or designee).
 - Initiate an evacuation and relocation (complete or partial).
 - Perform personnel accountability.
3. _____ Ensure appropriate action(s) to mitigate emergency conditions/events are being taken.
 - Consult with ISFSI Manager (or designee) on assessment and repair activities, and set the priorities of respondents.
 - Maintain appropriate access controls.
 - Maintain appropriate radiological controls.
4. _____ Ensure the Federal (NRC) and State agencies (DEP and DEMHS) are briefed periodically on current emergency conditions. Ensure ISFSI Manager (or designee) is familiar with ISFSI conditions.
5. _____ Inform the ISFSI Manager (or designee) of pertinent activities being directed by the ISS/ED (i.e., deployment of personnel into the ISFSI, equipment/system manipulation, and radiological monitoring).
6. _____ Ensure off-site officials receive updates of the emergency via the notification system as necessary.
7. _____ Discuss emergency exposure upgrades with the ISFSI Manager (or designee).
8. _____ Refer all requests for public information to the ISFSI Manager (or designee).

Attachment 4
Personnel Exposure Guidelines

(Page 1 of 2)

The ISS/ED shall employ the following additional controls to the entry of all personnel into a radiologically controlled area in response to an incident:

WARNING

Loss of shielding may not be visually evident.

- If there are any reasons to suspect elevated dose rates, obtain permission from qualified Radiation Protection Services to enter the ISFSI Pad Area, if available. Ensure that workers have adequate dose monitoring equipment with them prior to proceeding with the assessment activity.
- Assure that the appropriate emergency response RWP, with the appropriate dosimetry and set points, is used for the assessment activity.
- In all phases of incident response, plan the response activity such that dose is kept ALARA.
- Dose in excess of 5 Rem TEDE or 50 Rem SDE/WB requirements are reportable; however, notification activities that detract from immediate response to an emergency are undesirable and should not hamper prompt actions. As time permits, the ISS/ED shall notify the NRC of any personal doses in excess of the above.
- In situations where it is necessary to enter a Radioactive Materials Area for life saving actions or to accomplish damage assessment and/or repair that would protect the health and safety of on-site personnel, the following applies:
 - a) The ISS/ED may authorize exposure upgrades up to 25 Rem TEDE, or 250 Rem SDE or greater, as required to perform the actions necessary for lifesaving situations.
 - b) In situations where valuable property can be protected but life-saving activities are not involved, the ISS/ED may authorize exposure upgrades up to 10 Rem TEDE and 100 Rem SDE/WB.
 - c) The ISS/ED shall authorize an upper limit that is based on risk and benefit assessment for which the benefit of the action exceeds the risk of the exposure.
 - d) The ISS/ED shall record the authorized exposure in the ISFSI Log. The individuals TEDE year to date shall be accounted for in the dose authorization.
 - e) Older workers (over 45 years of age) with low lifetime dose should be considered for exposures above 25 Rem TEDE or 250 Rem SDE/WB.

Attachment 4
Personnel Exposure Guidelines

(Page 2 of 2)

- f) Individuals authorized for emergency exposures above 4.5 Rem (TEDE)/45 Rem (SDE/WB) must have their routine (normal) TLD replaced with an emergency TLD.
- f) Upon completion of any emergency entries, collect the emergency TLD for processing and return the routine TLD to the individual.
- g) Persons undertaking the mission in which emergency exposures exceed 25 Rem TEDE or 250 Rem SDE shall do so voluntarily and with full awareness of the risks. They shall be required to sign a statement stating they are aware of the risks, and are proceeding on a voluntary basis, prior to undertaking the mission.
- h) If an individual received dose in excess of the normal limits for exposure (5 Rem TEDE or 50 Rem SDE/WB), or the actual exposure is unknown but expected to have potentially exceeded these limits, implement the following actions as soon as possible:
- 1) Send the individual's dosimetry to the dosimetry laboratory for analysis.
 - 2) Notify Yale-New Haven Hospital, (203)785-2384, of the situation and REQUEST their guidance and assistance concerning the handling of the individual.
 - 3) Determine, in as much detail as possible, the conditions under which the exposure occurred.
 - 4) Transport the overexposed individual(s) to Middlesex Hospital for immediate evaluation or treatment, if medically necessary. Then send the individual to the Yale-New Haven Hospital for evaluation and/or long term definitive health care. Notify both hospitals as to whether or not the incoming individual is known to be contaminated or not.
-
- As warranted and practical, deploy portable air sampling equipment to sample potential airborne contamination, to be used and reported in accordance with Radiation Protection procedures, and recommend protective actions to reduce TEDE or SDE from an airborne release.
 - Notify deployed personnel of increased exposure limits via radio communications.
 - External contamination should be minimized by the use of protective clothing.
 - Track authorized emergency exposure in an appropriate manner, such as on the ISFSI Log.
 - Emergency exposure under these conditions shall be limited to once in a lifetime.
 - Permit emergency responders (Fire, Ambulance, and Police) to enter radiation areas with approved escort after they have been issued emergency dosimetry. When assignments have been completed, all personnel issued dosimetry who do not have a current NRC Form 4 shall complete the NRC Form 4 before leaving the site, or as soon as reasonably possible.

Attachment 5
Personnel Evacuation and Accountability
(Page 1 of 3)

All actions are to be taken by the ISS/ED unless otherwise noted. The ISS/ED makes the announcements directly.

- 1.0 Consider the following options for evacuation and relocation:
 - 1.1 General Evacuation:
 - a. If the incident affects the ISFSI, evacuate unnecessary personnel.
 - 1.2 Localized Area Evacuation and Relocation:
 - a. If the incident only affects a portion of the ISFSI, direct that personnel in a specific at-risk area within the ISFSI be relocated and personnel stand clear of that area.
- 2.0 Make all necessary ISFSI area announcements concerning the evacuation and relocation decided upon as follows:
 - 2.1 State the event classification and location and give a brief description of the event.
 - 2.2 Provide short, concise evacuation/relocation instructions.
 - 2.3 Repeat the announcement.
 - 2.4 If the paging system is inoperable or unavailable, use radios or send Security personnel to notify personnel of the incident classification and evacuation/relocation instructions.
- 3.0 Designate personnel to provide Radiation Protection Services coverage of evacuees as required.
- 4.0 Designate Security support to facilitate the personnel and vehicle traffic during the evacuation and relocation as required.
- 5.0 Before relocating personnel from the ISFSI, evaluate the environmental conditions to ensure that evacuees will be protected from exposure to an adverse environment by relocating.

Attachment 5
Personnel Evacuation and Accountability
(Page 2 of 3)

- 6.0 Any person exiting the site that causes a Radiological Monitor to alarm shall remain there until assisted by Radiation Protection Services personnel.
- 7.0 Personnel assigned to deal with an emergency event will remain at the scene of the event during an evacuation/relocation unless otherwise directed by ISS/ED.
- 8.0 Determine if there are any individuals who are unaccounted for and proceed to account for them as follows (may be designated to a Security Force Member):
- 8.1 Using any available means (radio, paging system, face-to-face communications) contact the designated work groups/supervision to determine if there are any personnel that are not accounted for.
- 8.2 Make a punchlist of the names of those that are unaccounted for, and use the list to track the accountability.
- 8.3 If it is determined that there are personnel unaccounted for, immediately perform the following:
- a. Make announcements in attempts to locate the Individual(s).
 - b. Review any ISFSI access records to determine/exclude possible location of the employee.
 - c. Contact the individual's supervisor, or designated relocation area to determine the employee's last known location or jobsite.
-
- d. Based on the results of the above, initiate search and rescue efforts if warranted.
- 9.0 Periodically inform the relocated assembled personnel of the status of the event.

Attachment 5
Personnel Evacuation and Accountability
(Page 3 of 3)

- 10.0 As appropriate, once the incident is stabilized, direct the evacuated personnel to perform one of the following:
- 10.1 Report back to work (e.g., subsequent assessment verifies emergency will be terminated).
 - 10.2 Remain assembled until ISS/ED personnel needs have been determined.
 - 10.3 Leave the site.
- 11.0 If an evacuation of the ISFSI area has been directed, and a radiological release has occurred, discuss radiological protection measures with the ISFSI Manager and perform the following as appropriate:
- 11.1 Determine if potentially contaminated people and/or vehicles should be surveyed on-site or at an upwind location (e.g., Haddam Neck Fire House, fair grounds, etc.).
 - 11.2 Inform relocated individuals of where they should go.
 - 11.3 Direct the decontamination of personnel and/or vehicles, as appropriate.

NOTE

On-Site personnel are allowed to conduct common sense decontamination such as the cutting away or removal of contaminated clothing. If skin contamination is suspected, qualified personnel, as determined by the Radiation Protection Manager, can perform personnel decontamination involving methods such as the use of water, soap, or other cleaning agents. This also applies to vehicle contamination.

- 11.4 If vehicles are extensively contaminated and cannot leave the site, obtain transportation for personnel from CY.
- 12.0 If personnel are directed to leave the site, notify Local Law Enforcement for traffic control, as required.

Attachment 6
Unusual Event Termination and Recovery
(Page 1 of 4)

Termination Checklist: - This Termination Checklist is to be used as a guideline in determining whether or not conditions allow the termination of the Unusual Event classification and the activation of the Recovery Plan. All checklist questions below shall be checked off **initialed/dated** by the ISS/ED or marked as not applicable (n/a) to verify that action is complete or not required, prior to activation of the Recovery Plan on the subsequent pages.

A. ISFSI Conditions

Initial/Date

- | | | |
|-------------|----|---|
| ____ / ____ | 1. | ISFSI conditions, systems, and/or equipment have been restored and/or replaced such that the ISFSI is not in an EAL condition that is an Unusual Event classification. |
| ____ / ____ | 2. | The ISFSI is in a stable condition. |
| ____ / ____ | 3. | Radioactive releases have been terminated and the potential for further unplanned releases in excess of Offsite Dose Calculation Manual limits has returned to normal. |
| ____ / ____ | 4. | The potential for a substantial degradation in the level of safety of the ISFSI no longer exists. |
| ____ / ____ | 5. | All appropriate organizations have been notified of the initiating event and the notification message acknowledgments have been received and documented. |
| ____ / ____ | 6. | Event termination message has been prepared. |

B. CONCURRENCE

Initial/Date

- | | | |
|-------------|----|---|
| ____ / ____ | 1. | The ISFSI Manager has approved the activation of the attached Recovery Plan. |
| ____ / ____ | 2. | The ISS/ED authorizes the transition to the attached Recovery Plan. |
| ____ / ____ | 3. | Determine if the NRC or CT DEP has any constraints on ISFSI recovery and reentry. |
| ____ / ____ | 4. | Establish communication and liaison for information flow and data exchange with the NRC and CT DEP. |

Attachment 6
Unusual Event Termination and Recovery
(Page 2 of 4)

C. NOTIFICATION

Initial/Date

____/____

1. A verbal report on the decision to enter Recovery has been given to the NRC, DEMHS and the CT DEP. Contact each by phone and state the following:

"This is the ISS-ED of Connecticut Yankee in Haddam Neck, CT. We have terminated the drill/emergency at _____ hours. I repeat, this is Connecticut Yankee in Haddam Neck, CT. We have terminated the drill/emergency at _____ hours."

Proceed to the attached Recovery Plan. Retain this completed page with the Recovery Plan.

Attachment 6
Unusual Event Termination and Recovery
 (Page 3 of 4)

Item No.	Item	Priority *	Assigned To	Due Date	Comments
1.	Determine the ability to maintain the ISFSI in a stable mode for an extended period of time, ensuring maintenance of all critical parameters.				
2.	Determine the extent of spent fuel damage, if applicable.				
3.	Determine the extent of ISFSI equipment damage.				
4.	Determine near-term potential for further radioactive liquid and gaseous leakage/releases including impact of weather changes, such as rain, etc.				
5.	Determine long-term potential for radioactive leakage/releases.				
6.	Determine adequacy of Radiation Protection Services procedures for ISFSI recovery and reentry operations.				
7.	Determine adequacy of Radiation Protection Services survey instruments for ISFSI recovery and reentry operations.				
8.	Determine adequacy of personnel dosimetry for ISFSI recovery and reentry operations.				
9.	Determine status of worker exposures from the emergency operations phase.				
10.	Determine need for new/modified security procedures. Determine if access to Owner Controlled Area should be secured.				
11.	Assist in the determination of the extent of off-site radiological conditions, food contamination, and extent of environmental cleanup necessary, if applicable.				

**ISFSI Management and the ISS/ED determines an item's priority.*

Attachment 7
ERO Information and Resources
Page 1 of 11

1.0 **OBJECTIVE**

- 1.1 To provide contacts and telephone numbers for use during an Emergency Organization Response (ERO) declared event and other emergencies.

2.0 **APPLICABILITY**

- 2.1 Applicable to when the Emergency Plan is activated.
- 2.2 Applicable to when conditions exists at the ISFSI which requires additional resources.

3.0 **REFERENCES**

- 3.1 N/A

4.0 **RESPONSIBILITY**

- 4.1 The ISFSI Shift Supervisor is responsible for providing an up to date copy of this procedure when Emergency Plan is activated.
-
- 4.2 If it is determined that any information is incorrect, the ISFSI Shift Supervisor is responsible for ensuring this instruction is revised.

5.0 **INSTRUCTIONS**

- 5.1 Refer to the appropriate attachment when needed.

Attachment 7
ERO Information and Resources
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ISFSI Shift Supervisor-Emergency Director (ISS-ED): (on-shift/call in)

<u>NAME</u>	<u>COMPANY</u>	<u>HOME #</u>	<u>CELL#</u>
R. Cox	Securitas	(860) 346-7142	(860) 882-9977
C. Poulos	Securitas	(860) 537-0143	(860) 882-9981
S. Buchan	Securitas	(860) 859-2763	(860) 882-9974
R. Pekarovic	Securitas	(860) 537-5665	(860) 573-9922
R. Desmarais	Securitas	(203) 585-6953	(860) 882-9976
F. DeBuono	Securitas	(860) 537-8146	(860) 331-3427
M. Baldarelli	Securitas	(203) 234-0259	(860) 882-9975
J. Beauchemin	Securitas	(860) 552-4466	(860) 334-3805

Call In Support Staff

<u>NAME</u>	<u>POSITION</u>	<u>HOME#</u>	<u>CELL#</u>
Wayne Norton	President	(207) 839-8469	(860) 573-3768
Jim Lenois	ISFSI Mgr.	(860) 793-2419	(860) 573-2751
James Connell	RP Mgr.	(207) 677-3342	(860) 573-4001
Shae Hemingway	Ops. Specialist	N/A	(860) 918-2825
Maureen Hallberg	Admin.	(860) 267-0628	(860) 573-9908
Carla Pizzella	Treasurer	(860) 633-1291	(860) 573-1884
Todd Smith	Business Mgr.	(207) 456-4578	(860) 573-5254
Bob Capstick	Media Relations	(617) 969-4431	(617) 699-4262

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Regional ISFSI Facilities

	<u>OFFICE#</u>	<u>HOME#</u>	<u>CELL#</u>
YANKEE ROWE ATOMIC			
Bob Mitchell	(413) 424-5261 x303	(508) 756-9119	(860) 573-0295
Security Alarm Station	(413) 424-5455		
ISFSI Shift Supervisor	(413) 424-5473		

	<u>OFFICE#</u>	<u>HOME#</u>	<u>CELL#</u>
MAINE YANKEE ATOMIC			
James Connell	(207) 882-1303	(207) 677-3342	(860) 573-4001
Chief's Office	(207) 882-1314		
Primary Alarm Station	(207) 882-1309		

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RSCS Radiation Protection (E-Plan Response):

RSCS

91 Portsmouth Avenue

Stratham, NH 03885-2468

(800) 525-8339 ■ (603) 778-2871 ■ Fax: (603) 778-6879

www.radsafety.com

<u>NAME</u>	<u>POSITION</u>	<u>HOME#</u>	<u>CELL#</u>
Frank Litterer	Radiation Protection Mgr.	(401) 295-3057	(401) 339-5134
E-MAIL: <u>folitterer@radsafety.com</u>			
Joe Medellin	Technician	(860) 299-2092	(860) 212-5986
Larry Fitzimmons	Technician	(860) 537-4350	(860) 319-7860

NAC International

NAC International

3930 East Jones Bridge Road

Norcross, GA 30092

(770) 447-1144

(770) 447-1797 (Fax)

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ERO Information and Resources
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GOVERNMENT AGENCIES

NRC Region 1

Compliance and Enforcement (610) 337-5000 (7:15am-4:15pm)
NOTE: Calls made after 4:15pm automatically roll over to the NRC Operations Center

King of Prussia, PA

NRC Region 1 Office (610) 337-5349 (Rapid Fax)
(610) 337-5324 (Rapid Fax)
(610) 337-5368 (Rapid Fax)

NRC Headquarters ENS Hotline
NRC OPS Center (301) 816-5100
Commercial Telephone System (301) 951-0550 (Primary Backup)
Health Physics Network (HPN) (301) 415-0550 (Secondary Backup)
(301) 816-5151 (FAX)

Attachment 7
ERO Information and Resources
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State of Connecticut

Department of Environmental Protection
divisions)

(860) 424-3000 (Information-all

Communications

DEP 24 hr. Response

(860) 424-3333

(* Ask for On-Call Radiation

(860) 424-4069 (FAX)

Protection Duty Officer)

Oil & Chemical Spill Response Division
Emergency)

(860) 424-3338 (24 hour

backup)

(860) 424-3333 (24 hour Emergency

Shift)

(860) 424-3377 (Business, Day

(860) 424-4062 (FAX)

Radiation Control Division

(860) 424-3029

79 Elm Street, Hartford

(860) 424-4065 (FAX)

Attachment 7
ERO Information and Resources
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GOVERNMENT AGENCIES (Cont'd)

Ed Wilds, DEP Director	(860) 424-3029 (Office)
Cell Phone (860) 490-3211	(860) 376-3469 (Home)
Email: Edward.Wilds@CT.Gov	(888) 405-0195 (DEP Pager)
Denny Galloway	(860) 424-3525(Office)
Cell Phone (860) 490-4051	(860) 464-1627 (Home)
	(860) 842-8234 (DEP Pager)
Mike Firsick	(860) 424-3517 (Office)
Cell Phone- (860) 916-1638	(860) 528-2375 (Home)
	(860) 939-4123 (DEP Pager)
Radiation Control Division	(860) 249-4239 (All Stations)
Hartford EOC	(860) 293-0471 (Duty Officer)
(When Staffed for a Drill or Incident)	(860) 566-6413 (FAX)

<u>Governor's Office</u>	(860) 566-4840 (Office)
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Dept of Emergency Mgmt & Homeland Security

William Hackett, Director	(860) 566-3180 (24 Hour)
	(860) 247-0664 (FAX)
Operations Officer	(860) 566-3313 (Office)
	(860) 566-2047 (Office)
	(860) 566-2928 (FAX)

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GOVERNMENT AGENCIES (Cont'd)

Department of Energy (DOE)

Radiological Assistance Brookhaven Lab (631) 344-2200 (24 hrs)
Upton, New York (631) 344-1336 (FAX)

U.S. Coast Guard 24 Hr.

Communications Center, New London, CT (442) 4471 (24 Hour)
(442) 7463 (FAX)

Communications Center, New Haven, CT (203) 468-4498 (24 Hour)
(203) 468-4473 (FAX)

Command Center, Boston, MA (617) 223-8555 (24 Hour)
(617) 223-8117 (FAX)

Connecticut National Guard (AVCRAD) (860) 441-2900
(860) 441-2971 (FAX)

U.S. EPA (Region I)

EPA Oil & Chemical Emergency Response (617) 223-7265 (24 hrs)
Boston, MA (617) 573-9616 (FAX)

National Response Center (800) 424-8802 (24 Hours)
(202) 267-2165 (FAX)

Federal Bureau of Investigation (203) 777-6311 (24 hrs)
New Haven, CT

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FIRE RESPONSE

Emergency Dispatch Center (KX)	911
Haddam Neck Volunteer Fire Dept.	(860) 267-0343 (Fire Station)
Bob McGarry – Haddam Neck Fire Chief	(860) 267-7906 (Home) (860) 930-8135 (Cell)

MEDICAL ASSISTANCE

Emergency Dispatch Center (KX)	911
Middlesex Hospital Primary Hospital Facility	(860) 344-6000 (Operator)
Life Star	(860) 545-4369 (Business) (800) 437-4378 (Emergency) (860) 545-4300 (EmergencyBackup)
Marlborough Clinic	(860) 358-3201
Yale-New-Haven-Hospital	(203)785-2384 (24-Hour Number)

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WEATHER INFORMATION

TELEPHONE

National Weather Service:

(508) 822-0634

Push 1 for latest Metropolitan

Forecast, then

For Hartford -- PUSH 4

INTERNET (All weather data recorded at Hartford/Brainard)

Weather Underground: www.wunderground.com/US/CT/Haddam.html

Weather Channel: www.weather.com/weather/local/USCT0089

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ISFSI Monitoring Station

(860) 267-6426	SAS – PBX
(860) 267-9183	SAS – PBX
(860) 267-9521	SAS – PBX
(860) 365-0375	ISFSI Support Facility (ISS Fax)
(860) 267-2410	SAS – Duress Verification
(480) 456-8024	Fixed Satellite Phone (SAS)
(480) 456-8025	Handheld Satellite Phone (EEE)
(480) 456-8029	Handheld Satellite Phone (VB-1)
(480) 456-8030	Handheld Satellite Phone (SAS)
(860) 874-6020	Cell Phone – EEE
(860) 573-2776	Cell Phone – SAS
(860) 573-2874	Cell Phone – ISS Desk ISFSI Support Facility
(700) 200-7520	HPN/ENS (SAS)