



CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT

362 INJUN HOLLOW ROAD • EAST HAMPTON, CT 06424-3099

January 22, 1998

Docket No. 50-213

CY-98-008

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

Haddam Neck Plant
Additional Information For
The Proposed Defueled Emergency Plan

The purpose of this letter is for Connecticut Yankee Atomic Power Company (CYAPCO) to provide the NRC with additional information with respect to the proposed Defueled Emergency Plan for the Haddam Neck Plant (HNP).

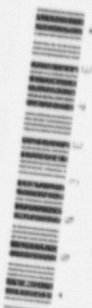
NRC Conference Call

On December 23, 1997 and on January 8, 1998 conference calls were held between the NRC Staff and CYAPCO. During these calls several questions were asked and enhancements to the proposed Defueled Emergency Plan were suggested. Attachment 1 to this letter provides CYAPCO's responses to these NRC Staff questions. Attachment 2 to this letter provides the updated and revised pages (i.e., entire sections have been provided where page breaks have shifted from previous submittals) to the proposed Defueled Emergency Plan,^(1, 2, 3, 4) which reflect the proposed enhancements suggested by both the NRC Staff and CYAPCO.

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- (1) CYAPCO Letter CY-97-047, from T. C. Feigenbaum, to the U. S. Nuclear Regulatory Commission, "Defueled Emergency Plan And Request For Exemption From 10CFR50.54(q) For Offsite Response," dated May 30, 1997.
- (2) CYAPCO Letter CY-97-103, from T. C. Feigenbaum, to the U. S. Nuclear Regulatory Commission, "Submittal Of The Emergency Action Levels For The Defueled Emergency Plan," dated September 19, 1997.
- (3) CYAPCO Letter CY-97-109, from T. C. Feigenbaum, to the U. S. Nuclear Regulatory Commission, "Additional Information On The Proposed Defueled Emergency Plan And The Request For Exemption From 10CFR50.54(q)," dated October 21, 1997.
- (4) CYAPCO Letter CY-98-008, from R. A. Mellor, to the U. S. Nuclear Regulatory Commission, "Additional Information For The Proposed Defueled Emergency Plan," dated December 18, 1997.

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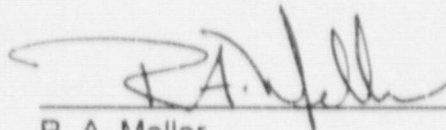
A request was also made to revise the exemption request for 10CFR50.47 and 10CFR50, Appendix E that was submitted in the October 21, 1997 and December 18, 1997 letters. These changes, denoted by revision bars, are provided in Attachment 3 and do not change the basis of the previously submitted exemption request. Both tables have been provided in this letter for completeness.

CYAPCO respectfully requests the NRC to expedite its review of the proposed Defueled Emergency Plan, the exemption request for a reduction in the financial protection requirements,⁽⁵⁾ and the proposed Defueled Security Plan.⁽⁶⁾ Timely review of these proposed plans and request are a high priority for CYAPCO and will help minimize the expenditure of decommissioning funds. As has been indicated,⁽⁴⁾ expenditures for maintaining the current level of insurance premiums and offsite emergency plan support are extensive.

If the NRC should have any questions, please contact Mr. G. P. van Noordennen at (860) 267-3938.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY



R. A. Mellor

Vice President - Operations and Decommissioning

Attachments

cc: H. J. Miller, NRC Region I Administrator
T. L. Fredrichs, NRC Project Manager, Haddam Neck Plant
W. J. Raymond, NRC Senior Resident Inspector, Haddam Neck Plant
D. Galloway, Acting Director, CT DEP Monitoring and Radiation Division

(5) CYAPCO Letter CY-97-065, from T. C. Feigenbaum, to the U. S. Nuclear Regulatory Commission, "Request For Exemptions From The Financial Protection Requirement Limits Of 10CFR50.54(w) And 10CFR140.11," dated October 7, 1997.

(6) CYAPCO Letter CY-97-071, from T. C. Feigenbaum, to the U. S. Nuclear Regulatory Commission, "Physical Security Plan And Security Suitability, Training And Qualification Plan," dated June 19, 1997.

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Attachment 1
Haddam Neck Plant
Additional Information For
The Proposed Defueled Emergency Plan
CYAPCO's Response To NRC Staff Questions

January 1998

NRC Question 1

Why is a notification time to the State of 60 minutes justified?

CYAPCO Response

The proposed Defueled Emergency Plan states:

"Within one hour after classification, the licensee on-shift staff reports the incident to the State [of Connecticut]."

10CFR50, Appendix E, Section IV.D.3 states:

"A licensee shall have the capability to notify State and local governmental agencies within 15 minutes after declaring an emergency. The licensee shall demonstrate that the State/local officials have the capability to make a public notification decision promptly on being informed by the licensee of an emergency condition."

The one hour notification time specified in the Defueled Emergency Plan is acceptable given the following considerations:

- ◆ The need for the officials to make public notification decisions has been eliminated given the current scope of possible accidents requiring emergency declaration at the plant;
- ◆ Given this consideration, a one hour time period was selected to allow the on-shift staff to focus on immediate mitigative and response actions and emergency classification. This time also allows the on-shift staff to complete a more comprehensive notification form, which in most cases would preclude the need for the State to callback immediately to the plant to obtain follow-up information; and
- ◆ As with the NRC notification, it is not assumed that the on-shift staff would wait any longer than necessary when making the notification and procedurally is listed as a step immediately following classification and performed simultaneously with notifying the plant staff.

NRC Question 2

Why is an accountability time of 60 minutes justified?

CYAPCO Response

The proposed DEP states:

"... It is the utilities' goal to complete [personnel] accountability [within the protected area] within one hour."

NUREG-0654, Section J.5 states that:

"Each licensee shall provide for a capability to account for all individuals onsite at the time of the emergency and ascertain the names of missing individuals within 30 minutes of the start of an emergency..."

NUREG 0654, Section J.4. states:

"Each licensee shall provide for the evacuation of onsite non-essential personnel in the event of a Site Area or General Emergency."

The one hour accountability time specified in the Defueled Emergency Plan is acceptable given the following considerations:

- ◆ It is implied by NUREG-0654, that accountability be conducted at the Site Area Emergency classification. In the Defueled Emergency Plan this will be conservatively required to be performed at the Alert classification which allows for search and rescue operations, which is the objective of relocation and personnel accountability, for lower consequence accidents; and
- ◆ The spectrum and magnitude of accidents requiring the declaration of an emergency have been greatly reduced.

NRC Question 3

Why is an augmentation time of 2 hours justified?

CYAPCO Response

The proposed Defueled Emergency Plan states:

"The goal of the DERO is to be fully staffed within 2 hours of the Emergency Director's classification of an Alert."

The 2 hour commitment to fully staff the DERO specified in the Defueled Emergency Plan is acceptable given the following considerations:

- ◆ The spectrum and magnitude of possible accidents have been greatly reduced; and
- ◆ This is the industry standard for defueled plans (i.e., Trojan, Rowe, Shoreham).

NRC Question 4

For Emergency Action Level (EAL) RA1, *Fuel Handling Accident Causing Damage to Spent Fuel Indicated by Radiation Monitors Alarming and Increasing*, please provide information on the following:

- a) What are the normal Fuel Building Area Radiation Monitor reading?
- b) What are the Spent Fuel Building Area Radiation Monitor alarm setpoint?
- c) What is 1000x normal reading?
- d) Is "and Increasing" needed?

CYAPCO Response

- a) The normal background reading for the Spent Fuel Pool Area Radiation Monitor is 0.4 mR/hr. This monitor is currently out of service and CYAPCO is working to restore it to operation. A portable monitor is available for use during the movement of spent fuel.
- b) The Spent Fuel Building Area Radiation Monitor alarm setpoint is 2x Background.
- c) Although 400 mR/hr would be offscale high on the readout in the Control Room, this situation in the Spent Fuel Building would be declared on another EAL based on the type of accident causing this dose rate (i.e., EU1-Fuel Pool Level, EU2-Fuel Pool Temperature, TU1-Destructive Phenomena, JU1-Judgement).
- d) The words "and Increasing" are needed to define the Alert classification. When a fuel handling accident occurs, it potentially damages the spent fuel. In order to require an Alert be declared, the radioactive gases from the damaged fuel would need to fill the Spent Fuel Building over a finite time period in which the area radiation monitor would alarm and show an increase. Without including the words "and Increasing" in the EAL a release of a very small amount of radioactive gas may occur into the Spent Fuel Building that would alarm the monitor but be so minimal that the monitor would not continue to increase and therefore not warrant the declaration of an Alert.

NRC Question 5

Why are there no Unusual Events under the "Security Event" Category?

CYAPCO Response

The EALs for security events affect the Spent Fuel Building and therefore, by definition, these events require an Alert be declared. This is also consistent with the proposed Defueled Security Plan.

The option also exists for the Shift Manager to declare an Unusual Event using EAL JU1, *Judgement*, if warranted.

NRC Question 6

Why is there no EAL specifically for a Resin Fire accident?

CYAPCO Response

- ◆ A resin fire without significant radiological consequences would be classified as an Unusual Event (EAL1-GU1, *Fire* [fire in the radiation control area (RCA) not extinguished within 15 minutes of control room notification of a fire or within 15 minutes of the fire alarm actuation in the control room]).
- ◆ A resin fire with significant radiological consequences would be classified as an Alert (EAL2-OA1, *Offsite Dose* [measured plume dose rate on-site \geq 5 mr/hr for > 15 minutes]).

NRC Question 7

Why is there no Alert for Toxic/Flammable Gases?

CYAPCO Response

The types and quantities of toxic and flammable gases as delineated in the Connecticut Yankee Hazardous Waste Contingency Plan do not warrant declaring an Alert classification.

In a letter dated June 30, 1981,⁽¹⁾ CYAPCO determined that there are no nearby industrial facilities offsite that would present a toxic and/or flammable gas threat to the HNP. In addition, the letter further states that the U. S. Coast Guard indicated in their judgement that no hazardous chemicals are shipped on the Connecticut River. Finally, the letter states that although oil barges do travel the Connecticut River and pass within 1,000 feet of the site, they do not pose a hazard to the HNP.

(1) CYAPCO Letter A01452, from W. G. Council, to D. M. Crutchfield (NRC), "SEP Topic II-1.C, Potential Hazards or Changes in Potential Hazards Due to Transportation, Institutional, Industrial and Military Facilities," dated June 30, 1981.

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Attachment 2
Haddam Neck Plant
Additional Information For
The Proposed Defueled Emergency Plan
Updated And Revised Pages
(revision bars are provided in the margin)

January 1998

The licensee's Technical Support Center (TSC) is located in an on-site building that is within the licensee's controlled area and near the protected/industrial area. The State EOC is in the National Guard Armory in Hartford, Connecticut about 24 miles from the site.

1.3 Actions

Table 1-1 provides the responsibilities and actions of the licensee. Table 1-2 provides the responsibilities of the licensee's emergency response facilities.

The licensee's response to an incident is to initiate assessment actions to classify the severity of the incident, notify state officials, mitigate further degradation of the plant systems, and assess the severity of the consequences. The licensee will classify the incident using Emergency Action Levels most of which are based on instrument readings in the Control Room. Within one hour after classification, the licensee on-shift staff reports the incident to the State and NRC. The site has the capacity of dedicated hotline/commercial telephone and radio communication to the Connecticut State Police and State OEM.

The licensee has the responsibility of ensuring that changing conditions at the plant that might cause the need for updated information and/or a reclassification are evaluated. Once a need for such information is evident or a need to reclassify is demonstrated, notifications will be made.

1.4 Public Information Program

The overall Public Information Program for the Station is described in Section 8.0. This program, designed for the media as well as the public, presents both general radiological and plant status information. The purpose of the program is to ensure that the public receives accurate and timely information regarding an incident at the plant.

5.0 Emergency Organization

This section describes the Defueled Emergency Response Organization (DERO). The DERO (Figure 5-1) replaces and prevails over the normal line function organization to respond to declared emergencies when activated.

Personnel are assigned to the DERO based on their normal job qualifications and other specialized training. They receive Defueled Emergency Plan training on their specific emergency functions.

The DERO is shown in Figure 5-1. The DERO is activated at the discretion of the Operations Shift Manager. The on-shift DERO personnel are supplemented by station and executive personnel who report to their emergency locations after being notified. The goal of the DERO is to be fully staffed within 2 hours of the Emergency Director's classification of an Alert. Augmented positions will be on-call; subject-to-call, as applicable; or call-in responders as defined in Appendix A. Minimum staffing for the DERO will consist of one Emergency Director, one Technical Response Coordinator, one Radiological Assessment Coordinator, one Communications Coordinator and one Public Information Coordinator. The Emergency Director has a goal of 60 minutes to respond to the station after being notified of an event. The Technical Response Coordinator, Radiological Assessment Coordinator, Communications Coordinator, and Public Information Coordinator each have a goal of two hours to respond to the station.

Also included in this section are brief descriptions of the State of Connecticut and other organizations and agencies that would provide assistance upon request. Appendix B contains copies of letters of agreement from these organizations, some specifying the type of assistance to be provided.

The on-shift/on-site positions are part of the normal station organization.

These positions include:

- Operations Shift Manager (as Emergency Director or Manager of Control Room Operations)
- Equipment Operator
- Security Shift Supervisor (Security Director)
- Health Physics Technician

These positions are described in Section 5.1, On-Shift Positions.

The augmented positions include the following:

On-Call:

- Emergency Director
- Technical Response Coordinator

- Radiological Assessment Coordinator
- Communications Coordinator
- Public Information Coordinator

These positions are described in Section 5.2., Augmented Positions.

5.1 On-Shift Positions

a. Operations Shift Manager (Emergency Director)

The Operations Shift Manager (OSM) initially assumes command of the DERO. In this position, the OSM becomes the Emergency Director (ED). The ED actions that cannot be delegated are specified in Section 5.2.a. After being relieved by the augmenting ED, the Operations Shift Manager becomes the Manager of Control Room Operations (MCRO).

The OSM's primary responsibilities as the ED include:

- Initial classification of the incident.
- Initial notification of the NRC, licensee and state.
- Initiating actions to mitigate degradation of plant systems.
- Authorization of radiation exposures in excess of 10CFR20 limits on a mission-specific basis.
- Initiation of station relocation, if necessary.
- Initiation of corrective actions.
- Assessment of dose consequences, if necessary.
- Managing control room operation and staff.

b. Equipment Operators (EO) perform their plant-related functions in accordance with unit procedures, and as directed by the OSM-ED/MCRO.

c. Security Shift Supervisor becomes the Security Director (SD), reports to the ED and is the senior station security person. The SD's responsibility is to ensure that site security is maintained.

The SD's primary responsibilities include:

- Establishing security at the Technical Support Center (TSC) and any other areas identified by the ED.

- Providing accountability of personnel in the protected /industrial area.
- Conducting relocation of site personnel as directed by the ED.

Other responsibilities include, but are not limited to, the following:

- Providing support for search and rescue activities, as directed.
- Maintaining ongoing accountability of emergency personnel within the protected/industrial area.

- d. Health Physics (HP) Technicians report to the OSM-ED and provide radiological support to the event.

The HP Technicians primary responsibilities include:

- Ensuring that radiological habitability in the control room is within acceptable limits and that unacceptable radiological areas are identified.
- Conducting radiological surveys to aid in classifying the event.
- Preparing Radiation Work Permits (RWPs) for personnel reporting to the Control Room.
- Providing Health Physics support and first aid for search and rescue activities and medical emergencies.

5.2 Augmented Positions

a. Emergency Director (ED)

The Emergency Director (ED) has command and control responsibility for overall coordination of the DERO.

The following responsibilities cannot be delegated by the ED:

- Classification of an incident and subsequent changes of classification.
- Notification of the initial incident and subsequent changes in classification.
- Ordering of relocation.
- Authorization of radiation exposures in excess of 10CFR20 limits until relieved by the Radiological Assessment Coordinator

(RAC). (The RAC can authorize exposure up to 25 Rem TEDE or 250 Rem skin dose (SDE); only the ED shall authorize exposure > 25 Rem TEDE or > 250 Rem SDE for life-saving activities)

The ED's primary responsibilities include:

- Assuming command and control of the DERO.
- Authorizing access to the protected/industrial area.
- Initiating notification of emergency response organization personnel and State officials and completing the information on the notification form.
- Discussing plant conditions with the MCRO and Technical Response Coordinator (TRC) to determine plant status and confirm classification.

Other responsibilities include, but are not limited to, the following:

- Requesting assistance as needed.
- Authorizing assistance from other outside companies (or vendors)/agencies, as needed.
- Providing information to the NRC and State representatives on a periodic basis.
- Providing written summaries after the termination of the emergency condition to the NRC.

b. Technical Response Coordinator (TRC)

The Technical Response Coordinator (TRC) reports to the ED in the TSC. The TRC is responsible for providing command and control of the DERO's technical, operational, assessment and repair staff which consists of mechanics, electricians, and instrumentation technicians. The technical support emergency response personnel report to the TRC.

The TRC's primary responsibilities include:

- Providing the ED with a comprehensive assessment of plant status; ensuring accident classification is kept current.
- Ensuring actions are taken to mitigate degradation of plant systems.
- Coordinating repair and corrective actions with the MCRO during the course of the accident response.
- Providing technical diagnosis of incident's cause.

- Prioritizing damage assessment and repair and corrective actions.
- Ensuring that Emergency Assessment, Repair, and Search/Rescue Teams are deployed, as required
- Obtaining and posting spent fuel pool parameters in the TSC.

c. Radiological Assessment Coordinator (RAC)

The Radiological Assessment Coordinator (RAC) reports to the ED in the TSC. The RAC is responsible for providing command and control of the radiological assessment of the event. This includes both on-site radiation protection and radiological dose assessment. The radiological support emergency response personnel report to the RAC.

The RAC's primary responsibilities include:

- Relieving the ED of the responsibility for authorizing exposures in excess of 10CFR20 limits up to 25 Rem TEDE or 250 Rem SDE.
- Keeping the ED informed of radiological conditions and trends.
- Ensuring health physics activities are performed (e.g. on-site radiological assessment, personnel exposure control and radiation protection programs.)
- Ensuring on-site radiological monitoring and dose assessment are performed.
- Approving all on-site personal protective action decisions (e.g., use of respiratory protection equipment.)
- Deploying on-site Radiation Monitoring Teams (RMTs) to survey radiation levels and sample for radioactive contamination.
- Providing and briefing Health Physics personnel for teams deployed into the plant (i.e., search and rescue/repair teams).
- Tracking and recording all mission-specific radiological exposures.
- Posting radiological status in the TSC.

d. Communications Coordinator (CC)

The Communications Coordinator (CC) reports to the ED. The CC coordinates the transmission of technical information between the Emergency Response Facilities (ERFs) and provides personnel and material resources to the site.

Additionally, the CC provides information concerning the operation and status of the plant and radiological conditions to the NRC Headquarters Emergency Operations Center, Bethesda, MD and the NRC Region 1 Emergency Response Center as requested.

The CC's primary responsibilities include:

- Relieving the Control Room staff of the NRC ENS communication responsibility.
- Obtaining plant parameter data.
- Completing the NRC Information Request Sheets as necessary and provide data to the NRC via the NRC ENS.
- Keeping the ED informed of the status of DERO staffing.
- Providing personnel and material resources to the site.
- Keeping the ED informed of NRC or state requests for information and data other than plant parameter or radiological data.

e. Public Information Coordinator (PIC)

The Public Information Coordinator (PIC) reports to the ED in the TSC. The PIC gathers and transmits emergency-related information.

Responsibilities include:

- Preparing news releases based on current emergency conditions.
- Performing the rumor control function for the station.
- Monitoring media broadcasts, as needed. Reporting any misinformation to the ED.
- Maintaining liaison with the state information staff personnel to expedite the handling of inquiries and control of rumors during the emergency.
- Posting general and rumor control information concerning the emergency in the TSC.

5.3 Personnel Assignments by Functional Areas

- a. Plant Emergency Operations are monitored and supervised from the Control Room under the direction of the ED/MCRO.
- b. On-site Radiological Surveying and Monitoring is accomplished by RMTs composed of trained station personnel. On-site RMTs are deployed from the TSC.
- c. Fire Brigade provides immediate response to a fire.
- d. Search and Rescue Teams are assembled at the TSC and are deployed by the TRC. The team leader is designated by the TRC depending on the type and location of the search and rescue activities required.
- e. First Aid treatment is provided by personnel trained in multimedia first aid or equivalent. Trained personnel are on-site 24 hours per day.
- f. Decontamination is accomplished by personnel experienced in decontamination methods. These personnel assemble at the TSC and are directed by the RAC.
- g. Security and Access Control are provided by the normal security force and are described in detail in the Station Defueled Security Plan.
- h. Maintenance, Repair, and Damage Control Support is provided by personnel reporting to the TSC with specialties in systems maintenance disciplines (Mechanic, Electrician, and I&C Technicians). These individuals are part of the normal plant staff. They are directed as needed to various station areas to make necessary repairs.
- i. Recordkeeping - A log is maintained by all directors, coordinators or designees.
- j. Communications - On-site communications are maintained at the ERFs and consist of telephones and/or two-way radios.

5.4 State and Local Government Response

There is no response required from state agencies. State and 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, ambulances) will respond to the plant in the event of an emergency.

If required, provisions exist for the State of Connecticut to halt traffic on the roads leading to the Haddam Neck Plant. The ED has the authority to request such support if it is needed.

In case of a potential or actual release of radioactive material, the following actions may be taken: (1) The State of Connecticut, DEP may dispatch field monitoring teams to survey for radiological releases and to monitor environmental impact, including ingestion concerns; to verify additional actions are not required to protect the health and safety of the public; (2) They may activate their emergency operations center to coordinate with the Haddam Neck Plant. Response actions may involve road blockades, traffic control, route alerting, relocation, food control and security patrols. Other response measures may include activities to support communication and public information.

5.5 Other Organizations Providing Assistance

Assistance from other commercial companies/agencies may be required. Letters of agreement have been developed to describe outside company/agency assistance and services. These letters of agreement are renewed annually to reaffirm assistance and to verify communication channels. The letters of agreement are contained in Appendix B. During or after an event, additional services can be provided by contractual agreement.

6.0 Emergency Measures

Emergency measures begin with the identification and classification of an emergency. Emergency measures include assessment actions, corrective actions, and recommendation of on-site personnel protective actions. The Defueled Emergency Action Levels (EALs) have predetermined values or conditions which, when met or exceeded, require declaration of the emergency classification, notification of the licensee emergency response organization, State and NRC officials, and corrective and/or on-site protective actions. A general outline is presented as follows:

6.1 Notification and Activation of Emergency Organizations

The authority and responsibility for initially classifying and declaring emergencies, initiating notification to emergency response organization personnel, State officials, and the NRC, and initiating immediate actions necessary to limit the consequences of the emergency resides with the Operations Shift Manager (OSM), who is onsite 24 hours/day.

The OSM initially assumes command and control of the DERO as the ED. After being relieved, the OSM then becomes the Manager of Control Room Operations (MCRO). Transfer of responsibility shall be verbal, clear and direct.

The ED assumes command and control of the DERO on an around-the-clock basis. The ED is responsible for ensuring that timely and appropriate classification and notification decisions are made.

When transfer of responsibilities for shift rotation takes place, a qualified relief director or coordinator reports onsite and is fully briefed as to current and past condition.

The DERO is activated by an announcement over the public address (PA) system and/or when the Station relocation siren is sounded, at the discretion of the OSM. The PA announcement includes the location of the incident, the classification, and general description of the ongoing event. Initially, the emergency organization consists of normal on-shift personnel. Simultaneous notification of the augmented emergency organizations and State officials is made.

6.1.1 Notification Message Formats

Predetermined message formats for notification of off-site agencies as well as the listing of off-site positions/personnel required to call back for notification verification are contained in the Defueled Emergency Plan Implementing Procedures.

The contents of the radiopager notification message include, as a minimum, the following:

- Title of Station representative making the report
- Station name
- Is/is not a drill
- Incident Classification/State Posture Code
- Date and time of incident and date and time of report
- Radioactive release status
- Current wind direction and speed

The primary notification contacts and the continuing lines of communication between on-site ERFs are indicated in Figures 7-1a through 7-1c.

6.2 Assessment Actions

6.2.1 Initial Assessment

Prior to the activation of the ERFs, the classification of an event by the Operations Shift Manager is based on Emergency Action Levels (EALs). The EAL tables lead to an incident classification based on instrument readings available in the Control Room or observation and are transmitted to the State using the NRC classification/posture code.

Dose calculations are performed by the on-shift staff when conditions warrant. Dose calculation responsibilities will be assumed by the augmented DERO personnel (Section 5.0). The results of the calculations will be transmitted to the State.

Additional technical services and support are obtained as necessary from a combination of Station and Executive personnel, and off-site assistance companies/agencies.

6.2.2 Dose Assessment

Further assessments by the DERO include determination of radiation exposure rates by analytical methods. This is accomplished through the use of the computerized dose calculation models or by hand calculations and/or on-site surveys. Continued assessments are performed as required and updates are provided to off-site authorities. The results may require reclassification of the emergency.

a. **Use of Station Monitors**

The station has systems for monitoring radioactive materials released to the environment. A multi-range primary vent stack radiation monitor determines release rates during an emergency. This multi-range monitor covers the entire postulated range of releases and encompasses the values specified for an ALERT classification. Procedures have been established for converting these monitor readings into release rates.

The site has a permanent meteorological installation that records wind speed, direction, and temperature differences continuously in the Control Room and at 15-minute intervals on the Environmental Data Acquisition Network (EDAN) system. The EDAN system can be monitored in the TSC.

b. **Use of the Defueled Emergency Action Levels (EALs)**

The Defueled EALs in the Defueled Emergency Plan Implementing Procedures contain effluent monitor radiation levels which correspond to precalculated doses and appropriate classification levels.

c. **Dose Estimates for Radioactive Releases**

Upon determination of an emergency or potential emergency condition resulting in a release of radioactive material, doses at the site boundary will be calculated. In these cases, estimated release rates are combined with meteorological dispersion estimates in order to predict the site boundary doses.

Once the TSC is activated and radiological dose assessment personnel have arrived, estimates of site boundary doses will be continued by the RAC and can also be based on the analysis of actual RMT data.

6.3 **Corrective Actions**

Station procedures contain steps to take preventive and/or corrective actions in order to avoid or mitigate serious consequences.

The instrumentation, control systems, and radiation monitoring systems provide indications of the safe and orderly operation of the unit. These systems provide the operator with the information and controls needed to monitor the Spent Fuel Pool. They further provide the means to cope with an emergency condition should it occur. Control of systems and display of information from these various systems are in the Control Room at locations convenient to the operator. This instrumentation provides the basis for event classification and initiation of on-site protective actions.

The following additional corrective actions are implemented during emergency situations when necessary:

6.3.1 Fire Fighting

Procedures for responding to fire situations are available in the Control Room. The fire brigade leader is in charge of extinguishing the fire.

Applicable health physics, security, and safeguards procedures apply during fire response. If outside assistance is needed, the Haddam Neck Volunteer Fire Company is called.

6.3.2 Damage Control, Repair, and Decontamination

The Station personnel normally handle cleanup, repair and damage control. For some ALERT operations, the support of specialized outside contractors may be obtained, if required. Decontamination of personnel, and equipment is conducted in accordance with approved procedures.

6.4 Protective Actions

6.4.1 On-site Protective Actions

If the personnel in the protected/industrial area have been relocated, Security will conduct accountability of all personnel in the protected/industrial area and a search of habitable buildings located in the exclusion area to ensure personnel have assembled in the TSC.

The radiological protective actions specified in this section and in the Defueled Emergency Plan Implementing Procedures augmented by the normal health physics procedures are used during an emergency unless alternative actions are identified and authorized by the ED. The RAC assumes all the responsibilities of the Health Physics Manager and establishes Radiologically Controlled Areas (RCAs) in response to the incident. Access to an RCA is controlled by the Emergency Team briefing process unless immediate access is authorized by the ED to facilitate emergency repairs.

a. Action Criteria

Protective actions are taken when an incident has occurred, or may occur, that could result in concentrations of airborne radioactivity, radiation levels, or contamination levels that exceed limits for a specific area or areas and cannot be readily controlled.

b. **Notification and Response Time**

The actuation of radiation alarms, station relocation alarm, fire alarms, and public address announcements, as applicable, alerts personnel to hazardous conditions and actions they must take. Notification is made upon classification of the emergency.

c. **Security and Site Access Control**

All personnel reporting from off-site areas during an emergency check in to the TSC. Personnel entering the site must pass through a security control point at the north gate. Personnel accessing the protected/industrial area must be authorized by the ED.

If necessary, site access is controlled by barricading and manning the site access gates. Station security procedures are available to deal with various emergency situations.

d. **Relocation**

Relocation is a station-wide event and normally occurs upon initiation of an ALERT. A relocation alarm actuator is located in the control room. This actuator activates the relocation alarms in all areas.

Upon hearing the Station Relocation Alarm:

- On-shift and augmented DERO personnel report to their respective ERFs.
- All other CY station personnel report on foot to the TSC.
- All other personnel (station, executive, visitor, contractor) report to the Energy Information Center.

e. **Personnel Accountability**

At the sounding of the station relocation siren, on-shift personnel report to the Control Room and DERO and CY station personnel report to the TSC. The Control Room has a card reader which accounts for DERO members who report there. All other personnel report to the nearest access point, pass through the portal monitors, are badged out of the protected/industrial area and report to the Energy Information Center.

The OSM (MCRO) will provide the names and/or keycard number of all personnel under his cognizance to the SD. The SD will communicate with the security personnel at the Central Alarm Station to ascertain when all personnel have been processed out of the protected/industrial area (security personnel also "sweep" the

protected/industrial and station areas to ensure all personnel have relocated). The accountability program will be run immediately after verifying the access points are clear of personnel.

The SD provides the names of personnel in the protected/industrial area not shown as assembled at an ERF on the accountability print to the ED. The ED accounts for the personnel he has dispatched to respond to the event. The names of personnel he cannot account for are announced over the public announcing system. They are directed to call the Control Room. If, after a reasonable period of time (e.g., five minutes), no response has been received, they are considered as missing. At this time, initial accountability is completed and search and rescue actions are initiated. It is the utilities' goal to complete the accountability within one hour. Instructions for conducting the above actions are contained in the Defueled Emergency Plan Implementing Procedures.

The SD will continuously account for personnel entering and leaving the protected/industrial area and will notify the ED of all personnel entering the area. Managers controlling DERO personnel within the protected/industrial area are responsible for the accountability of their personnel. Personnel returning to the protected/industrial areas are logged in and out.

f. **Monitoring Personnel**

Individuals within the Radiologically Controlled Area (RCA) of the plant are required to have in their possession emergency dosimetry capable of measuring the dose received from external sources of ionizing radiation. All personnel within the site boundary are monitored for radioactive contamination prior to leaving the owner controlled area. All personnel are monitored as they enter the TSC by passing through the permanently mounted portal monitor. A radiation survey meter is also immediately available to locate contaminated areas. Specific monitoring actions are provided in the Health Physics Radiation Protection Manual (RPM) and Defueled Emergency Plan Implementing Procedures. Contaminated personnel will report to the decontamination area in the TSC. Documentation of surveys of contaminated personnel will be maintained. Any person suspected or known to have an intake of radioactive material will be bioassayed as soon as conditions permit.

6.4.2 **Use of On-site Protective Equipment and Supplies**

Protective equipment and supplies, as represented in Table 6-1, are used to minimize external and internal radiological exposure and contamination to personnel entering the station. Detailed procedures on the use of protective equipment and supplies are in the Health Physics Radiation Protection Manual (RPM).

6.4.3 Contamination Control Measures

Measures are taken to minimize and/or prevent direct exposure to or ingestion of radioactive materials. Personnel are advised not to consume on-site drinking water and food supplies during an incident until sampling and analysis indicate no contamination.

Material can be removed from a radiologically controlled area (RCA) in accordance with Health Physics RPM Procedures.

For Station areas outside the protected/industrial area, on-site RMTs and Health Physics personnel are used to identify contaminated areas and Security is used to control access.

6.4.4 Personnel Radiation Dose Determination

HP technicians are able to determine integrated doses for the personnel authorized to wear dosimetry. HP technicians may also accompany emergency teams as they make emergency entries into RCAs.

Emergency dosimetry is used by the initial DERO responders. After the initial phase of the emergency, additional dosimetry is distributed from the TSC Health Physics Control Point by HP personnel and is issued (if required) to individuals, including off-site individuals who arrive at the TSC.

Thermoluminescent Dosimeters (TLDs) are available from and analyzed by the NU Dosimetry Laboratory. The individual integrated dose records are maintained by HP personnel using a computer system. Exposure information is recorded from self-reading dosimeters and updated when official dose results are available. TLDs will be read based on frequencies specified in the Health Physics RPM Procedures.

6.5 Aid to Affected Personnel

Provisions are made to assist personnel who are injured and/or have received high radiation exposures. Personnel on-site are trained in multi-media first aid and radiation protection procedures. First aid and decontamination facilities are available on-site and off-site, and necessary transportation services are also available. The following subsections describe measures to be used to provide any necessary assistance.

6.5.1 Exposure Control Guidelines

Planned actions are carefully examined by weighing the risks and consequences of potential exposure and injury against the probability of success and the benefits to be gained from these actions.

In the event of an ALERT, emergency worker exposure limits can be increased by the RAC up to 25 Rem TEDE or 250 Rem SDE in accordance

with EPA 400. This limit remains in effect until mission specific limits are needed and authorized by the appropriate manager as depicted in Table 6-2.¹ Exposures are commensurate with the significance of the objective and are held to the lowest levels that the emergency permits. In all situations, every reasonable effort is made to minimize exposure to emergency personnel.

6.5.2 Emergency Exposure Control Guidelines for Off-site Assistance

If off-site emergency personnel are required during a nuclear incident to support combating fires, providing emergency assistance, and transporting injured and/or contaminated injured to nearby medical treatment facilities, the limits set forth in station procedures for Emergency Response Organization personnel shall apply. Appropriate dosimetry will be issued to all offsite responders in accordance with Health Physics RPM Procedures.

Fixed medical facility staff personnel performing medical treatment on injured and/or contaminated injured persons shall control exposure in accordance with their emergency procedure and shall be issued appropriate dosimetry.

All dosimetry will be evaluated to determine and document the actual exposure received responding to an emergency.

6.5.3 Decontamination

Radiological decontamination of personnel and equipment and waste disposal are conducted in accordance with approved Health Physics RPM Procedures.

During emergencies, personnel onsite are monitored for contamination, as necessary. Personnel found to be contaminated are decontaminated under the direction of trained health physics personnel.

Personnel experienced in decontamination methods are part of the on-site Radiation Protection staff. Decontamination measures include isolating affected areas, placing contaminated personnel in clean protective clothing before moving, and decontaminating personnel, their clothing, and equipment prior to release.

The TSC contains a shower in the decontamination room with a waste water holding tank. Decontamination supplies are maintained in lockers in the TSC. The TSC is the principal decontamination location during emergencies. Vehicles will be decontaminated outside of the Warehouse as conditions permit. If on-site areas are not usable, the Millstone Nuclear Power Station EOF has similar facilities and could be used for decontamination/exposure assessment activities.

(1) NRC Inspection Report 50-213/92-06 and NU Response B14186 dated July 7, 1992.

6.5.4 First Aid

The Station maintains an Industrial Health Facility (first aid facility) licensed by the Connecticut Labor Department. It is located in the administrative building outside the plant protected/industrial area and is equipped to handle the temporary care of a patient until the services of a physician can be obtained or until transported to a fixed medical facility.

Shift personnel trained in multi-media first aid are available onsite (on a 24-hour per day basis) and assist injured or ill personnel either at the scene of the accident or in the first aid facility. If affected personnel must be transported to a hospital, measures are taken to prevent the spread of contamination. Such measures might include putting the person in clean protective clothing or wrapping the person in blankets and alerting the ambulance personnel who provide transportation.

6.5.5 Medical Transportation

Injured or radioactively contaminated injured personnel requiring hospitalization are transported using the ambulance service from the local community (see Letter of Agreement in Appendix B). This ambulance service is available on a 24-hour basis. The ambulance crews are trained to handle contaminated cases. Personnel qualified in radiation protection are directed to report to the receiving hospital or accompany the injured and contaminated patients to the hospital. A telephone call to the hospital to provide details of the incident is made and radio communications between the Control Room, hospital, and ambulance is available. Station procedures provide detailed instructions for station personnel to carry out these actions.

6.5.6 Off-site Medical Facility Treatment

Arrangements for the primary care of injured, radioactively contaminated personnel are made with the Middlesex Hospital in Middletown and Lawrence and Memorial Hospital in New London (see Letter of Agreement in Appendix B). Communications will be by commercial telephone lines. The hospital staffs will be provided with training annually and the facility is equipped to handle contaminated injured patients. Contaminated wounds are treated and decontaminated as necessary by the hospital staff.

6.6 Public Information

The public information emergency response is handled by the Public Information Coordinator (PIC). The PIC reports to the TSC and gathers and transmits pertinent information as specified in the appropriate Derived Emergency Plan Implementing Procedure.

TABLE 6-1
USE OF PROTECTIVE EQUIPMENT AND SUPPLIES

<u>Equipment</u>	<u>Criteria for Issuance</u>	<u>Location</u>	<u>Means of Distribution</u>
Full Face Canister Respirator	As needed by on-site Emergency Teams in areas of high airborne radioactivity	Control Room Selected Emergency Monitoring Kits/Lockers (TSC) Respiratory Issue Room (Service Building)	Picked up at nearest location and used by qualified station personnel as needed
Self-contained Breathing Apparatus	Inhalation hazard during fire fighting Airborne radioactivity in excess of administratively set levels	Control Room Various Areas in Plant/Station TSC	Issued and used as needed by qualified Station personnel
Protective Clothing (Coveralls, Hoods, Boots, Gloves)	As needed in contaminated areas	Control Room Various Areas of the Plant TSC	Issued and used as needed

TABLE 6-2
EMERGENCY EXPOSURE LIMITS*

<u>Category</u>	<u>TEDE</u>
Annual Part 20	5.0 rem ⁽¹⁾
Mission to protect valuable property	10.0 rem ⁽²⁾
Mission to save a life or prevent/mitigate a severe accident	25.0 rem ⁽³⁾
Voluntary Mission to save a life or prevent/mitigate a severe accident	>25.0 rem ⁽⁴⁾

*NOTES:

- (1) Automatic exposure up to, but not more than 5 rem Total Effective Dose Equivalent (TEDE) or 50 rem skin (SDE/WB) may be allowed. When authorized, members of the DERO responding to on-site emergency response facilities become designated emergency workers subject to NRC 10CFR50.47.b.11 radiation exposure controls which are the US EPA 400 guidelines for on-site emergency workers.
- (2) In accordance with EPA 400, emergency workers are allowed an exposure up to 10 rem TEDE or 100 SDE/WB for operations necessary to protect valuable property as authorized by the RAC.
- (3) Depending on station radiological conditions, authorized emergency workers may receive exposures up to a job/mission-specific designated limit, not to exceed 25 rem TEDE or 250 rem SDE/WB as authorized by the RAC.
- (4) When authorized by the ED, exposures above 25 rem TEDE or 250 rem SDE/WB may be received for life saving activities on a volunteer basis and with full awareness of the risk involved.

NOTE: It is recognized by NRC and EPA that an accident involving significant radiation exposure is a low probability occurrence. An exposure level below 25 rem TEDE or 250 rem SDE/WB is not considered to be life-threatening and will be limited to once in a lifetime. ALARA principles will be applied when possible. Doses received during an emergency are included as part of the workers occupational exposure record and subtracted from the planned special exposure available.

All exposures in excess of 10CFR20 will be tracked and recorded as once in a lifetime exposures. TEDE is defined in Appendix A.

Contamination (Radioactive)

The deposition of radioactive material in any place where it is unwanted (e.g., on persons, products or equipment).

Control Room

The Control Room is the primary location where conditions of the unit are monitored, controlled and where corrective actions are directed to mitigate any emergency.

Decontamination

The reduction or removal of contaminating radioactive material from a person, area or object by cleaning or washing.

Defueled Emergency Action Levels (DEALs)

Thresholds for initiating emergency actions as designating a particular class of emergency, initiating a notification procedure, or initiating a particular protective action.

DERO

The Decommissioning organization responsible for Station operations under emergency conditions.

Dosimeter

A device that records radiation exposure.

Emergency

Any abnormal condition that could affect the health and safety of people or safe operation of equipment.

Emergency Classification System

A system that arranges abnormal conditions in order of severity. They are as follows listed in order of increasing severity:

- UNUSUAL EVENT (State Posture Code, DELTA-ONE/DELTA-TWO)
- ALERT (State Posture Code, CHARLIE-ONE)

Emergency Position Responsibility

- On-call
 - Fit for duty while on call. No alcohol five hours before assuming the duty and totally abstain while on duty.
 - Duty starts Monday 7:00am. Formal turnover needed with the oncoming person. If turnover not made, retain the duty.
 - Able to report to the site within allotted time. (ED has a goal of 60 minutes; TRC, RAC, CC, and PIC each have a goal of 2 hours)
 - All training requirements met.
 - Radiopager on at all times while on duty.

Attachment 3
Haddam Neck Plant
Additional Information For
The Proposed Defueled Emergency Plan
Revised Table 1, "Requested Offsite Exemptions"
And
Revised Table 2, "Requested Onsite Exemptions"
(revision bars are provided in the margin)

January 1998

Table 1
Requested Offsite Exemptions

Regulation	Requirement	Basis For Exemption
10CFR50.47(b)(4)	A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, no offsite response measures are required.
10CFR50.47(b)(5)	Procedures have been established for notification, by the licensee, of State and local response organizations [(normal emergency services)] and for notification of emergency personnel by all organizations; the content of initial and followup messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, no offsite notification of the general public is required. What is meant by "normal emergency services" is the local Police/Fire Departments, Ambulance Services and Hospitals, as appropriate.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50.47(b)(6)	Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, communications with the public will now be via news releases. No capability for prompt communication or telephone calls to the public is required.
10CFR50.47(b)(7)	Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, the periodic mailings to the residents are no longer necessary as they will have no response actions.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50.47(b)(9)	Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, no methods, systems, and equipment will be maintained for the determination of actual offsite dose consequences.
10CFR50.47(b)(10)	A range of protective actions have been developed for the plume exposure pathway EPZ for emergency workers and the public. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, the EPZs and associated protective actions are no longer required.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV) Preamble	The applicant's emergency plans shall contain, but not necessarily be limited to, information needed to demonstrate compliance with the elements set forth below: i.e., organization for coping with radiation emergencies, assessment action, activation of emergency organization, notification procedures, emergency facilities and equipment, training, maintaining emergency preparedness, and recovery. In addition, the emergency response plans submitted by an applicant for a nuclear power reactor operating license shall contain information needed to demonstrate compliance with the standards described in § 50.47(b), and they will be evaluated against those standards. The nuclear power reactor operating license applicant shall also provide an analysis of the time required to evacuate and for taking other protective actions for various sectors and distances within the plume exposure pathway EPZ for transient and permanent populations.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, evacuation times and protective actions within the EF Z are no longer required.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV)(A)(2)(c)	Authorities, responsibilities, and duties of an onsite emergency coordinator who shall be in charge of the exchange of information with offsite authorities responsible for coordinating and implementing offsite emergency measures [(normal emergency services)].	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, the coordination and implementation of offsite emergency measures are no longer required. However, this coordinator will still exchange information with offsite authorities. What is meant by "normal emergency services" is the local Police/Fire Departments, Ambulance Services and Hospitals, as appropriate.
10CFR50, Appendix E, (IV)(A)(4)	Identification, by position and function to be performed, of persons within the licensee organization who will be responsible for making offsite dose projections, and a description of how these projections will be made and the results transmitted to State and local [(normal emergency services)] authorities, NRC, and other appropriate governmental entities.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, offsite dose projections are no longer required. However, any dose projections for the exclusion area boundary will still be transmitted. What is meant by "normal emergency services" is the local Police/Fire Departments, Ambulance Services and Hospitals, as appropriate.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV)(A)(8)	Identification of the State and/or local officials responsible for planning for, ordering, and controlling appropriate protective actions, including evacuations when necessary.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, identification of State and local authorities responsible for protective actions is no longer required.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV)(B)	<p>The means to be used for determining the magnitude of and for continually assessing the impact of the release of radioactive materials shall be described, including emergency action levels that are to be used as criteria for determining the need for notification and participation of local [(normal emergency services)] and State agencies, the Commission, and other Federal agencies, and the emergency action levels that are to be used for determining when and what type of protective measures should be considered within and outside the site boundary to protect health and safety. The emergency action levels shall be based on in-plant conditions and instrumentation in addition to onsite and offsite monitoring. These emergency action levels shall be discussed [with the State (Connecticut) and local (Town of Haddam) governmental authorities] and agreed on by the applicant and State [(Connecticut)] and local governmental authorities and approved by NRC. They shall also be reviewed with the State and local governmental authorities on an annual basis.</p>	<p>As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, offsite protective measures and monitoring are no longer required. What is meant by "normal emergency services" is the local Police/Fire Departments, Ambulance Services and Hospitals, as appropriate.</p>

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV)(C)	The entire spectrum of emergency conditions that involve the alerting or activating of progressively larger segments of the total emergency organization shall be described. The communication steps to be taken to alert or activate emergency personnel under each class of emergency shall be described. Emergency action levels (based not only on onsite and offsite radiation monitoring information but also on readings from a number of sensors that indicate potential emergency, such as the pressure in containment and the response of the Emergency Core Cooling System) for notification of offsite agencies shall be described. The existence, but not the details, of a message authentication scheme shall be noted for such agencies. The emergency classes defined shall include: (1) notification of unusual events, [and] (2) alert; (3) site area emergency, and (4) general emergency. These classes are further discussed in NUREG-0654; FEMA-REP-1.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, offsite radiation monitoring shall not be conducted. Containment pressure sensors and the Emergency Core Cooling system are no longer required in the permanently shutdown and defueled condition. Site area and general emergency are no longer credible emergency classifications.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV)(D)(1)	Administrative and physical means for notifying local [(normal emergency services)], State, and Federal officials and agencies and agreements reached with these officials and agencies for the prompt notification of the public and for public evacuation or other protective measures, should they become necessary, shall be described. This description shall include identification of the appropriate officials, by title and agency, of the State and local [(normal emergency services)] government agencies within the EPZs.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, the prompt notification of the public shall no longer be required. Notification of Federal, and State should occur within 1 hour. What is meant by "normal emergency services" is the local Police/Fire Departments, Ambulance Services and Hospitals, as appropriate.
10CFR50, Appendix E, (IV)(D)(2)	Provisions shall be described for yearly dissemination to the public within the plume exposure pathway EPZ of basic emergency planning information, such as the methods and times required for public notification and the protective actions planned if an accident occurs, general information as to the nature and effects of radiation, and a listing of local broadcast stations that will be used for dissemination of information during an emergency. Signs or other measures shall also be used to disseminate to any transient population within the plume exposure pathway EPZ appropriate information that would be helpful if an accident occurs.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, no annual mailing will be conducted. Similarly, no signs or other measures for notification of transient populations shall be required.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV)(D)(3)	A licensee shall have the capability to notify responsible State and local [(normal emergency services)] governmental agencies within 45 minutes [1 hour] after declaring an emergency. The licensee shall demonstrate that the State/local officials have the capability to make a public notification decision promptly on being informed by the licensee of an emergency condition. . . . The responsibility for activating such a public notification system shall remain with the appropriate governmental authorities.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, notifications to State agencies will take place within 1 hour. Similarly, no alert notification system shall be required. What is meant by "normal emergency services" is the local Police/Fire Departments, Ambulance Services and Hospitals, as appropriate.
10CFR50, Appendix E, (IV)(E)(9)(a)	Provision for communications with contiguous State/local [(normal emergency services)] governments within the plume exposure pathway EFZ . Such communications shall be tested monthly.	As offsite participation by State and local authorities is no longer required, only communications will be conducted with the State and local agencies. Such equipment, for contacting State agencies, will be tested monthly. What is meant by "normal emergency services" is the local Police/Fire Departments, Ambulance Services and Hospitals, as appropriate.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption:
10CFR50, Appendix E, (IV)(F)(1) Last Paragraph	In addition, a radiological orientation training program shall be made available to local services personnel; e.g., local emergency services/Civil Defense, local law enforcement personnel, local news media persons.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, the training of local news media is no longer required.
10CFR50, Appendix E, (IV)(F)(2)	The plan shall describe provisions for the conduct of emergency preparedness exercises as follows: Exercises shall test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, test the public notification system, and ensure that emergency organization personnel are familiar with their duties.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, the public notification system will no longer be required.
10CFR50, Appendix E, (IV)(F)(2)(a)	A full participation exercise which tests as much of the licensee, State and local emergency plans as is reasonably achievable without mandatory public participation shall be conducted for each site at which a power reactor is located.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, the offsite full participation exercise will no longer be required.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV)(F)(2)(c)	Offsite plans for each site shall be exercised biennially with full participation by each offsite authority having a role under the plan. Where the offsite authority has a role under a radiological response plan for more than one site, it shall fully participate in one exercise every two years and shall, at least, partially participate in other offsite plan exercises in this period.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, the offsite full participation exercise will no longer be required
10CFR50, Appendix E, (IV)(F)(2)(e)	Licensees shall enable any State or local [(normal emergency services)] government located within the plume exposure pathway EPZ to participate in the licensee's drills when requested by such State or local [(normal emergency services)] government.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, the offsite drills will no longer be required. However, CYAPCO will notify State and local response organizations of scheduled drills and determine their interest in participating. What is meant by "normal emergency services" is the local Police/Fire Departments, Ambulance Services and Hospitals, as appropriate.

Table 1
Requested Offsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV)(F)(2)(f)	Remedial exercises will be required if the emergency plan is not satisfactorily tested during the biennial exercise, such that NRC, in consultation with FEMA, cannot find reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency. The extent of State and local participation in remedial exercises must be sufficient to show that appropriate corrective measures have been taken regarding the elements of the plan not properly tested in the previous exercises.	As there are no design basis or other credible events that would result in doses beyond the exclusion area boundary that would exceed the EPA PAGs, the biennial offsite full participation exercise will no longer be required. Hence remedial exercises will similarly no longer be required.

Table 2
Requested Onsite Exemptions

Regulation	Requirement	Basis for Exemption
10CFR50.47(b)(3)	Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the licensee's near-site Emergency Operations Facility have been made, and other organizations capable of augmenting the planned response have been identified.	As offsite emergency response is no longer required, the HNP EOF shall no longer be retained.
10CFR50, Appendix E, (IV)(A)(3)	A description, by position and function to be performed, of the licensee's headquarters personnel who will be sent to the plant site to augment the onsite emergency organization.	The level of emergency response required by the HNP Defueled Emergency Plan does not require response to the plant by headquarters personnel.
10CFR50, Appendix E, (IV)(A)(5)	Identification, by position and function to be performed, of other employees of the licensee with special qualifications for coping with emergency conditions that may arise. Other persons with special qualifications, such as consultants, who are not employees of the licensee and who may be called upon for assistance for emergencies shall also be identified. The special qualifications of these persons shall be described.	The HNP Defueled Emergency Plan does not specify individuals with "special qualifications" for emergency response.
10CFR50, Appendix E, (IV)(E)(8)	A licensee onsite technical support center and a licensee near-site emergency operations facility from which effective direction can be given and effective control can be exercised during an emergency;	The HNP Defueled Emergency Plan does not require the use of an EOF. Effective direction and control during an emergency shall emanate from the HNP Control Room or the TSC.

Table 2
Requested Onsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV)(E)(9)(c)	Provision for communications among the nuclear power reactor control room, [and] the onsite technical support center and the near-site emergency operations facility; and among the nuclear facility, the principal State and local emergency operations centers, and the field assessment teams. Such communications systems shall be tested annually.	Communications with the EOF and local emergency operations centers are no longer required as these facilities shall no longer be maintained. Communications under the HNP Defueled Emergency Plan are tested in accordance with 10CFR50, Appendix E, (IV)(E)(9)(a).
10CFR50, Appendix E, (IV)(E)(9)(d)	Provisions for communications by the licensee with NRC Headquarters and the appropriate NRC Regional Office Operations Center from the nuclear power reactor control room, [and] the onsite technical support center, and the near-site emergency operations facility. Such communications shall be tested monthly.	Communications with the EOF are no longer required as this facility shall no longer be maintained. Communications, with the NRC, under the HNP Defueled Emergency Plan are tested monthly.

Table 2
Requested Onsite Exemptions
(continued)

Regulation	Requirement	Basis For Exemption
10CFR50, Appendix E, (IV)(F)(2)(b)	Each licensee at each site shall conduct an exercise of its onsite emergency plan every 2 years [year]. The exercise may be included in the exercise required by paragraph 2.c of this section. In addition, the licensee shall take actions necessary to ensure that adequate emergency response capabilities are maintained[.] during the interval between biennial exercises by conducting drills, including at least one drill involving a combination of some of the principal functional areas of the licensee's onsite emergency response capabilities. The principal functional areas of emergency response include activities such as management and coordination of emergency response, accident assessment, protective action decisionmaking, and plant system repair and corrective actions. During these drills, activation of all of the licensee's emergency response facilities would not be necessary, licensees would have the opportunity to consider accident management strategies, supervised instruction would be permitted, operating staff would have the opportunity to resolve problems rather than have controllers intervene, and the drills could focus on onsite training objectives.	CYAPCO shall exercise the HNP Defueled Emergency Plan each year. The HNP Defueled Emergency Plan does not require the use of an EOF, or an OSC. Effective direction and control during an emergency shall emanate from the HNP Control Room or the Technical Support Center.