

I. Accident Assessment

Planning Standard

Adequate methods, systems and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Evaluation Criteria

Applicability and Cross
Reference to Plans

Licensee State Local

1. Each licensee shall identify plant system and effluent parameter values characteristic of a spectrum of off-normal conditions and accidents, and shall identify the plant parameter values or other information which correspond to the example initiating conditions of Appendix I. Such parameter values and the corresponding emergency class shall be included in the appropriate facility emergency procedures. Facility emergency procedures shall specify the kinds of instruments being used and their capabilities.

X _____

2. Onsite capability and resources to provide initial values and continuing assessment throughout the course of an accident shall include post-accident sampling capability, radiation and effluent monitors, in-plant iodine instrumentation, and containment radiation monitoring in accordance with NUREG-0578, as elaborated in the NRC letter to all power reactor licensees dated October 30, 1979.

X _____

3. Each licensee shall establish methods and techniques to be used for determining:

- a. the source term of releases of radioactive material within plant systems. An example is the relationship between the containment radiation monitor(s) reading(s) and radioactive material available for release from containment.

X _____

I. Accident Assessment (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
b. the magnitude of the release of radioactive materials based on plant system parameters and effluent monitors.	X _____		
4. Each licensee shall establish the relationship between effluent monitor readings and onsite and offsite exposures and contamination for various meteorological conditions.	X _____		
5. Each licensee shall have the capability of acquiring and evaluating meteorological information sufficient to meet the criteria of Appendix 2. There shall be provisions for access to meteorological information by at least the nearsite Emergency Operations Facility, the Technical Support Center, the Control Room and an offsite NRC center. The licensee shall make available to the State suitable meteorological data processing interconnections which will permit independent analysis by the State, of facility generated data in those States with the resources to effectively use this information.	X _____		
6. Each licensee shall establish the methodology for determining the release rate/projected doses if the instrumentation used for assessment are offscale or inoperable.	X _____		
7. Each organization shall describe the capability and resources for field monitoring within the plume exposure Emergency Planning Zone which are an intrinsic part of the concept of operations for the facility.	X _____	X _____	X _____

I. Accident Assessment (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
8. Each organization, where appropriate, shall provide methods, equipment and expertise to make rapid assessments of the actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways. This shall include activation, notification means, field team composition, transportation, communication, monitoring equipment and estimated deployment times.	X	X	X
9. Each organization shall have a capability to detect and measure radioiodine concentrations in air in the plume exposure EPZ as low as 10^{-7} uCi/cc (microcuries per cubic centimeter) under field conditions. Interference from the presence of noble gas and background radiation shall not decrease the stated minimum detectable activity.	X	X	
10. Each organization shall establish means for relating the various measured parameters (e.g., contamination levels, water and air activity levels) to dose rates for key isotopes (i.e., those given in Table 3, page 18) and gross radioactivity measurements. Provisions shall be made for estimating integrated dose from the projected and actual dose rates and for comparing these estimates with the protective action guides. The detailed provisions shall be described in separate procedures.	X	X	
11. Arrangements to locate and track the airborne radioactive plume shall be made, using either or both Federal and State resources.		X	

J. Protective Response

Planning Standard

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.

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
1. Each licensee shall establish the means and time required to warn or advise onsite individuals and individuals who may be in areas controlled by the operator, including:			
a. Employees not having emergency assignments;	X _____		
b. Visitors;	X _____		
c. Contractor and construction personnel; and	X _____		
d. Other persons who may be in the public access areas on or passing through the site or within the owner controlled area.	X _____		
2. Each licensee shall make provisions for evacuation routes and transportation for onsite individuals to some suitable offsite location, including alternatives for inclement weather, high traffic density and specific radiological conditions.	X _____	X _____	X _____
3. Each licensee shall provide for radiological monitoring of people evacuated from the site.	X _____		

J. Protective Response (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
4. Each licensee shall provide for the evacuation of onsite non-essential personnel in the event of a Site or General Emergency and shall provide a decontamination capability at or near the monitoring point specified in J.3.	X		
5. 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 and account for all onsite individuals continuously thereafter.	X		
6. Each licensee shall, for individuals remaining or arriving onsite during the emergency, make provisions for:			
a. Individual respiratory protection;	X		
b. Use of protective clothing; and	X		
c. Use of radioprotective drugs, (e.g., individual thyroid protection).	X		
7. Each licensee shall establish a mechanism for recommending protective actions to the appropriate State and local authorities. These shall include Emergency Action Levels corresponding to projected dose to the population-at-risk, in accordance with Appendix 1 and with the recommendations set forth in Tables 2.1 and 2.2 of the Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (EPA-520/1-75-001). As specified in Appendix 1, prompt notification shall be made directly to the offsite authorities responsible for implementing protective measures within the plume exposure pathway Emergency Planning Zone.	X		

J. Protective Response (continued)

Evaluation Criteria

Applicability and Cross
Reference to Plans

Licensee State Local

8. Each licensee's plan shall contain time estimates for evacuation within the plume exposure EPZ. These shall be in accordance with Appendix 4.

X _____

9. Each State and local organization shall establish a capability for implementing protective measures based upon protective action guides and other criteria. This shall be consistent with the recommendations of EPA regarding exposure resulting from passage of radioactive airborne plumes, (EPA-520/1-75-001) and with those of DHEW (DHHS)/FDA regarding radioactive contamination of human food and animal feeds as published in the Federal Register of December 15, 1978 (43 FR 58790).

X _____ X _____

10. The organization's plans to implement protective measures for the plume exposure pathway shall include:

a. Maps showing evacuation routes, evacuation areas, preselected radiological sampling and monitoring points, relocation centers in host areas, and shelter areas; (identification of radiological sampling and monitoring points shall include the designators in Table J-1 or an equivalent uniform system described in the plan);

X _____ X _____ X _____

b. Maps showing population distribution around the nuclear facility. This shall be by evacuation areas (licensees shall also present the information in a sector format);

X _____ X _____ X _____

c. Means for notifying all segments of the transient and resident population;

X _____ X _____ X _____

d. Means for protecting those persons whose mobility may be impaired due to such factors as institutional or other confinement;

X _____ X _____

TABLE J-1
SECTOR AND ZONE DESIGNATORS FOR RADIOLOGICAL SAMPLING
AND MONITORING POINTS WITHIN EMERGENCY PLANNING ZONES

SECTOR NOMENCLATURE		ZONE NOMENCLATURE	
CENTERLINE OF SECTOR IN DEGREES TRUE NORTH FROM FACILITY	22 1/2° SECTOR	MILES FROM FACILITY	ZONE
0 & 360	*A N	0-1	1
22 1/2	B NNE	1-2	2
45	C NE	2-3	3
67 1/2	D ENE	3-4	4
90	E E	4-5	5
112	F ESE	5-6	6
135	G SE	6-7	7
157	H SSE	7-8	8
180	J S	8-9	9
202 1/2	K SSW	9-10	10
225	L SW	10-15	15
247 1/2	M WSW	15-20	20
270	N W	20-25	25
292 1/2	P WNW	25-30	30
315	Q NW	30-35	35
337 1/2	R NNW	35-40	40
		40-45	45
		45-50	50

AREA SEGMENT - An area is identified by a Sector and Zone designator. Thus, area NL is that area which lies between 348 3/4 and 11 1/4 degrees true north from the facility out to a radius of 1 mile. Area SE4 would be that area between 123 3/4 to 146 1/4 degrees and the 3- and 4-mile arcs from the facility.

*The letters I and O have been omitted from these sector designators so as to eliminate possible confusion between letters and numbers.

J. Protective Response (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
e. Provisions for the use of radioprotective drugs, particularly for emergency workers and institutionalized persons within the plume exposure EPZ whose immediate evacuation may be infeasible or very difficult, including quantities, storage, and means of distribution.		X	X
f. State and local organizations' plans should include the method by which decisions by the State Health Department for administering radioprotective drugs to the general population are made during an emergency and the pre-determined conditions under which such drugs may be used by offsite emergency workers; ¹		X	X
g. Means of relocation;		X	X
h. Relocation centers in host areas which are at least 5 miles, and preferably 10 miles, <u>beyond</u> the boundaries of the plume exposure emergency planning zone; (See J.12).		X	X
i. Projected traffic capacities of evacuation routes under emergency conditions;		X	X
j. Control of access to evacuated areas and organization responsibilities for such control;		X	X
k. Identification of and means for dealing with potential impediments (e.g., seasonal impassability of roads) to use of evacuation routes, and contingency measures;		X	X
l. Time estimates for evacuation of various sectors and distances based on a dynamic analysis (time-motion study under various conditions) for the plume exposure pathway emergency planning zone (See Appendix 4); and		X	X

1/ See DHEW (now DHHS) Federal Register notice of December 15, 1978 (43 FR 58798) entitled "Potassium Iodide as a Thyroid-Blocking Agent in a Radiation Emergency." Other guidance concerning the storage, stockpiling, and conditions for use of this drug by the general public, is now under development by the Bureau of Drugs, DHHS.

J. Protective Response (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
m. The bases for the choice of recommended protective actions from the plume exposure pathway during emergency conditions. This shall include expected local protection afforded ² in residential units or other shelter for direct and inhalation exposure, as well as evacuation time estimates.	X	X	
11. Each State shall specify the protective measures to be used for the ingestion pathway, including the methods for protecting the public from consumption of contaminated food-stuffs. This shall include criteria for deciding whether dairy animals should be put on stored feed. The plan shall identify procedures for detecting contamination, for estimating the dose commitment consequences of uncontrolled ingestion, and for imposing protection procedures such as impoundment, decontamination, processing, decay, product diversion, and preservation. Maps for recording survey and monitoring data, key land use data (e.g., farming), dairies, food processing plants, water sheds, water supply intake and treatment plants and reservoirs shall be maintained. Provisions for maps showing detailed crop information may be by including reference to their availability and location and a plan for their use. The maps shall start at the facility and include all of the 50-mile ingestion pathway EPZ. Up-to-date lists of the name and location of all facilities which regularly process milk products and other large amounts of food or agricultural products originating in the ingestion pathway Emergency Planning Zone, but located elsewhere, shall be maintained.			X
2/ The following reports may be considered in determining protection afforded.			
(1) "Public Protection Strategies for Potential Nuclear Reactor Accidents" Sheltering Concepts with Existing Public and Private Structures" (SAND 77-1725), Sandia Laboratory.			
(2) "Examination of Offsite Radiological Emergency Measures for Nuclear Reactor Accidents Involving Core Melt" (SAND 78-0454), Sandia Laboratory.			
(3) "Protective Action Evaluation Part II, Evacuation and Sheltering as Protective Actions Against Nuclear Accidents Involving Gaseous Releases" (EPA 520/1-78-001B). U. S. Environmental Protection Agency.			

J. Protective Response (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
12. Each organization shall describe the means for registering and monitoring of evacuees at relocation centers in host areas. The personnel and equipment available should be capable of monitoring within about a 12 hour period all residents and transients in the plume exposure EPZ arriving at relocation centers.		X	X

K. Radiological Exposure Control

Planning Standard

Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

Evaluation Criteria

Applicability and Cross
Reference to Plans

Licensee State Local

1. Each licensee shall establish onsite exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Actions Guides (EPA 520/1-75/001) for:

- | | |
|--|---------|
| a. removal of injured persons; | X _____ |
| b. undertaking corrective actions; | X _____ |
| c. performing assessment actions; | X _____ |
| d. providing first aid; | X _____ |
| e. performing personnel decontamination; | X _____ |
| f. providing ambulance service; and | X _____ |
| g. providing medical treatment services. | X _____ |

2. Each licensee shall provide an onsite radiation protection program to be implemented during emergencies, including methods to implement exposure guidelines. The plan shall identify individual(s), by position or title, who can authorize emergency workers to receive doses in excess of 10 CFR Part 20 limits. Procedures shall be worked out in advance for permitting onsite volunteers to receive radiation exposures in the course of carrying out lifesaving and other emergency activities. These procedures shall include expeditious decision making and a reasonable consideration of relative risks.

X _____

K. Radiological Exposure Control (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
3.a. Each organization shall make provision for 24-hour-per-day capability to determine the doses received by emergency personnel involved in any nuclear accident, including volunteers. Each organization shall make provisions for distribution of dosimeters, both self-reading and permanent record devices.	<u>X</u>	<u>X</u>	<u>X</u>
b. Each organization shall ensure that dosimeters are read at appropriate frequencies and provide for maintaining dose records for emergency workers involved in any nuclear accident.	<u>X</u>	<u>X</u>	<u>X</u>
4. Each State and local organization shall establish the decision chain for authorizing emergency workers to incur exposures in excess of the EPA General Public Protective Action Guides (i.e., EPA PAGs for emergency workers and lifesaving activities).		<u>X</u>	<u>X</u>
5.a. Each organization as appropriate, shall specify action levels for determining the need for decontamination.	<u>X</u>	<u>X</u>	<u>X</u>
b. Each organization, as appropriate, shall establish the means for radiological decontamination of emergency personnel wounds, supplies, instruments and equipment, and for waste disposal.	<u>X</u>	<u>X</u>	<u>X</u>
6. Each licensee shall provide onsite contamination control measures including:			
a. area access control;	<u>X</u>		
b. drinking water and food supplies;	<u>X</u>		
c. criteria for permitting return of areas and items to normal use, see Draft ANSI 13.12.	<u>X</u>		

K. Radiological Exposure Control (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
7. Each licensee shall provide the capability for decontaminating relocated onsite personnel, including provisions for extra clothing and decontaminants suitable for the type of contamination expected, with particular attention given to radioiodine contamination of the skin.	X		

L. Medical and Public Health Support

Planning Standard

Arrangements are made for medical services for contaminated injured individuals.¹

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
1. Each organization shall arrange for local and backup hospital and medical services having the capability for evaluation of radiation exposure and uptake, including assurance that persons providing these services are adequately prepared to handle contaminated individuals.	X _____	X _____	X _____
2. Each licensee shall provide for onsite first aid capability.	X _____		
3. Each State shall develop lists indicating the location of public, private and military hospitals and other emergency medical services facilities within the State or contiguous States considered capable of providing medical support for any contaminated injured individual. The listing shall include the name, location, type of facility and capacity and any special radiological capabilities. These emergency medical services should be able to radiologically monitor contamination personnel, and have facilities and trained personnel able to care for contaminated injured persons.		X _____	
4. Each organization shall arrange for transporting victims of radiological accidents to medical support facilities.	X _____	X _____	X _____

1/ The availability of an integrated emergency medical services system and a public health emergency plan serving the area in which the facility is located and, as a minimum, equivalent to the Public Health Service Guide for Developing Health Disaster Plans, 1974, and to the requirements of an emergency medical services system as outlined in the Emergency Medical Services System Act of 1973 (P.L. 93-154 and amendments in 1979 P.L. 96-142), should be a part of and consistent with overall State or local disaster control plans and should be compatible with the specific overall emergency response plan for the facility.

M. Recovery and Reentry Planning and Postaccident Operations

Planning Standard

General plans for recovery and reentry are developed.

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
1. Each organization, as appropriate, shall develop general plans and procedures for reentry and recovery and describe the means by which decisions to relax protective measures (e.g., allow reentry into an evacuated area) are reached. This process should consider both existing and potential conditions.	X _____	X _____	X _____
2. Each licensee plan shall contain the position/title, authority and responsibilities of individuals who will fill key positions in the facility recovery organization. This organization shall include technical personnel with responsibilities to develop, evaluate and direct recovery and reentry operations. The recovery organization recommended by the Atomic Industrial Forum's "Nuclear Power Plant Emergency Response Plan" dated October 11, 1979, is an acceptable framework.	X _____		
3. Each licensee and State plan shall specify means for informing members of the response organizations that a recovery operation is to be initiated, and of any changes in the organizational structure that may occur.	X _____	X _____	
4. Each plan shall establish a method for periodically estimating total population exposure.	X _____	X _____	

N. Exercises and Drills

Planning Standard

Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

Evaluation Criteria

Applicability and Cross
Reference to Plans

Licensee State Local

1.a. An exercise is an event that tests the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations. The emergency preparedness exercise shall simulate an emergency that results in offsite radiological releases which would require response by offsite authorities. Exercises shall be conducted as set forth in NRC and FEMA rules.

X X X

b. An exercise shall include mobilization of State and local personnel and resources adequate to verify the capability to respond to an accident scenario requiring response. The organization shall provide for a critique of the annual exercise by Federal and State observers/evaluators. The scenario should be varied from year to year such that all major elements of the plans and preparedness organizations are tested within a five-year period. Each organization should make provisions to start an exercise between 6:00 p.m. and midnight, and another between midnight and 6:00 a.m. once every six years. Exercises should be conducted under various weather conditions. **Some** exercises should be unannounced.

X X X

N. Exercises and Drills (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
2. A drill is a supervised instruction period aimed at testing, developing and maintaining skills in a particular operation. A drill is often a component of an exercise. A drill shall be supervised and evaluated by a qualified drill instructor. Each organization shall conduct drills, in addition to the annual exercise at the frequencies indicated below:			
a. <u>Communication Drills</u>			
Communications with State and local governments within the plume exposure pathway Emergency Planning Zone shall be tested monthly. Communications with Federal emergency response organizations and States within the ingestion pathway shall be tested quarterly. Communications between the nuclear facility, State and local emergency operations centers, and field assessment teams shall be tested annually. Communication drills shall also include the aspect of understanding the content of messages.	X _____	X _____	X _____
b. <u>Fire Drills</u>			
Fire drills shall be conducted in accordance with the plant (nuclear facility) technical specifications.	X _____		
c. <u>Medical Emergency Drills</u>			
A medical emergency drill involving a simulated contaminated individual which contains provisions for participation by the local support services agencies (i.e., ambulance and offsite medical treatment facility) shall be conducted annually. The offsite portions of the medical drill may be performed as part of the required annual exercise.	X _____		X _____

N. Exercises and Drills (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
d. <u>Radiological Monitoring Drills</u>			
Plant environs and radiological monitoring drills (onsite and offsite) shall be conducted annually. These drills shall include collection and analysis of all sample media (e.g., water, vegetation, soil and air), and provisions for communications and record keeping. The State drills need not be at each site. Where appropriate, local organizations shall participate.	X	X	X
e. <u>Health Physics Drills</u>			
(1) Health Physics drills shall be conducted semi-annually which involve response to, and analysis of, simulated elevated airborne and liquid samples and direct radiation measurements in the environment. The State drills need not be at each site.	X	X	
(2) Analysis of implant liquid samples with actual elevated radiation levels including use of the post-accident sampling system shall be included in Health Physics drills by licensees annually.	X		
3. Each organization shall describe how exercises and drills are to be carried out to allow free play for decisionmaking and to meet the following objectives. Pending the development of exercise scenarios and exercise evaluation guidance by NRC and FEMA the scenarios for use in exercises and drills shall include but not be limited to, the following:			
a. The basic objective(s) of each drill and exercise and appropriate evaluation criteria;	X	X	X

N. Exercises and Drills (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
b. The date(s), time period, place(s) and participating organizations;	X _____	X _____	X _____
c. The simulated events;	X _____	X _____	X _____
d. A time schedule of real and simulated initiating events;	X _____	X _____	X _____
e. A narrative summary describing the conduct of the exercises or drills to include such things as simulated casualties, offsite fire department assistance, rescue of personnel, use of protective clothing, deployment of radiological monitoring teams, and public information activities; and	X _____	X _____	X _____
f. A description of the arrangements for and advance materials to be provided to official observers.	X _____	X _____	X _____
4. Official observers from Federal, State or local governments will observe, evaluate, and critique the required exercises. A critique shall be scheduled at the conclusion of the exercise to evaluate the ability of organizations to respond as called for in the plan. The critique shall be conducted as soon as practicable after the exercise, and a formal evaluation should result from the critique.	X _____	X _____	X _____
5. Each organization shall establish means for evaluating observer and participant comments on areas needing improvement, including emergency plan procedural changes, and for assigning responsibility for implementing corrective actions. Each organization shall establish management control used to ensure that corrective actions are implemented.	X _____	X _____	X _____

0. Radiological Emergency Response Training

Planning Standard

Radiological emergency response training is provided to those who may be called on to assist in an emergency.

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
1. Each organization shall assure the training of appropriate individuals.	X _____	X _____	X _____
a. Each facility to which the plant applies shall provide site specific emergency response training for those offsite emergency organizations who may be called upon to provide assistance in the event of an emergency. ^{1/}	X _____		
b. Each offsite response organization shall participate in and receive training. Where mutual aid agreements exist between local agencies such as fire, police and ambulance/rescue, the training shall also be offered to the other departments who are members of the mutual aid district.		X _____	X _____
2. The training program for members of the onsite emergency organization shall, besides classroom training, include practical drills in which each individual demonstrates ability to perform his assigned emergency function. During the practical drills, on-the-spot correction of erroneous performance shall be made and a demonstration of the proper performance offered by the instructor.	X _____		

^{1/} Training for hospital personnel, ambulance/rescue, police and fire departments shall include the procedures for notification, basic radiation protection, and their expected roles. For those local services support organizations who will enter the site, training shall also include site access procedures and the identity (by position and title) of the individual in the onsite emergency organization who will control the organizations' support activities. Offsite emergency response support personnel should be provided with appropriate identification cards where required.

0. Radiological Emergency Response Training (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
3. Training for individuals assigned to licensee first aid teams shall include courses equivalent to Red Cross Multi-Media.	<u>X</u>		
4. Each organization shall establish a training program for instructing and qualifying personnel who will implement radiological emergency response plans. ^{2/} The specialized initial training and periodic retraining programs (including the scope, nature and frequency) shall be provided in the following categories:			
a. Directors or coordinators of the response organizations;	<u>X</u>	<u>X</u>	<u>X</u>
b. Personnel responsible for accident assessment;	<u>X</u>	<u>X</u>	<u>*</u>
c. Radiological monitoring teams and radiological analysis personnel;	<u>X</u>	<u>X</u>	<u>*</u>
d. Police, security and fire fighting personnel;	<u>X</u>	<u>*</u>	<u>X</u>
e. Repair and damage control/correctional action teams (onsite);	<u>X</u>		
f. First aid and rescue personnel;	<u>X</u>	<u>*</u>	<u>X</u>
g. Local support services personnel including Civil Defense/Emergency Service personnel;	<u>X</u>		<u>X</u>
h. Medical support personnel;	<u>X</u>	<u>X</u>	<u>X</u>
i. Licensee's headquarters support personnel;	<u>X</u>		
j. Personnel responsible for transmission of emergency information and instructions.	<u>X</u>	<u>X</u>	<u>X</u>

^{2/} If State and local governments lack the capability and resources to accomplish this training, they may look to the licensee and the Federal government (FEMA) for assistance in this training.

* NRC and FEMA encourage State and local governments which have these capabilities to continue to include them in their training programs.

0. Radiological Emergency Response Training (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
5. Each organization shall provide for the initial and annual retraining of personnel with emergency response responsibilities.	X _____	X _____	X _____

P. Responsibility for the Planning Effort: Development, Periodic Review and Distribution of Emergency Plans

Planning Standard

Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
1. Each organization shall provide for the training of individuals responsible for the planning effort.	X _____	X _____	X _____
2. Each organization shall identify by title the individual with the overall authority and responsibility for radiological emergency response planning.	X _____	X _____	X _____
3. Each organization shall designate an Emergency Planning Coordinator with responsibility for the development and updating of emergency plans and coordination of these plans with other response organizations.	X _____	X _____	X _____
4. Each organization shall update its plan and agreements as needed, review and certify it to be current on an annual basis. The update shall take into account changes identified by drills and exercises.	X _____	X _____	X _____
5. The emergency response plans and approved changes to the plans shall be forwarded to all organizations and appropriate individuals with responsibility for implementation of the plans. Revised pages shall be dated and marked to show where changes have been made.	X _____	X _____	X _____
6. Each plan shall contain a detailed listing of supporting plans and their source.	X _____	X _____	X _____

P. Responsibility for the Planning Effort: Development, Periodic Review and Distribution of Emergency Plans (continued)

<u>Evaluation Criteria</u>	<u>Applicability and Cross Reference to Plans</u>		
	<u>Licensee</u>	<u>State</u>	<u>Local</u>
7. Each plan shall contain as an appendix listing, by title, procedures required to implement the plan. The listing shall include the section(s) of the plan to be implemented by each procedure.	X _____	X _____	X _____
8. Each plan shall contain a specific table of contents. Plans submitted for review should be cross-referenced to these criteria.	X _____	X _____	X _____
9. Each licensee shall arrange for and conduct independent reviews of the emergency preparedness program at least every 12 months. (An independent review is one conducted by any competent organization either internal or external to the licensee's organization, but who are not immediately responsible for the emergency preparedness program). The review shall include the emergency plan, its implementing procedures and practices, training, readiness testing, equipment, and interfaces with State and local governments. Management controls shall be implemented for evaluation and correction of review findings. The result of the review, along with recommendations for improvements, shall be documented, reported to appropriate licensee corporate and plant management, and involved Federal, State and local organizations, and retained for a period of five years.	X _____		
10. Each organization shall provide for updating telephone numbers in emergency procedures at least quarterly.	X _____	X _____	X _____