



50-445

Texas Department of Health

Robert Bernstein, M.D., F.A.C.P.
Commissioner

1100 West 49th Street
Austin, Texas 78756
(512) 458-7111

Robert A. MacLean, M.D.
Deputy Commissioner
Professional Services
Hermas L. Miller
Deputy Commissioner
Management and Administration

October 5, 1982

Mr. Spottswood B. Burwell
Licensing Program Manager
USNRC
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

Dear Mr. Burwell:


Enclosed for your information is a complete set of the State of Texas response to Regional Assistance Committee comments concerning the State portion of off-site Radiological Emergency Management plans for the Comanche Peak Steam Electric Station (CPSES).

Also enclosed is a set of the change pages which constitute Change 1 to the State Plan. As you will note, all of these changes are to Tab 1 of Appendix 7, the Bureau of Radiation Control's appendix to Annex L of the State Plan. No changes to the basic State Plan were required in response to the RAC comments; nor were any changes required in Annex L or Appendix 7.

Local planners are currently revising the plans of Hood and Somervell Counties as a result of comments received from the RAC. When those revised plans are available we will send you a copy of the local response; which we have been informed will consist of a completely reprinted plan and a revised cross reference in addition to some narrative responses from each county.

We enjoyed visiting with you during the Atomic Safety and Licensing Board hearings in Fort Worth. Thank you for the information you provided, and we would appreciate any further assistance concerning identification of developments affecting the issuance of an operating license for CPSES.

Sincerely,


Clarence L. Borr
Emergency Planning Coordinator
Bureau of Radiation Control

X005



DIVISION OF EMERGENCY MANAGEMENT

TEXAS DEPARTMENT OF PUBLIC SAFETY

WILLIAM P. CLEMENTS, JR.
Governor

5805 N. Lamar Blvd.
Box 4087
Austin, Texas 78773
Duty Hours 512/465-2138
Nonduty Hours 512/465-2000

JAMES B. ADAMS
Director

ROBERT A. LANSFORD
Coordinator

October 5, 1982

Mr. Jerry D. Stephens, Director
Federal Emergency Management Agency
Federal Regional Center
Region VI
Denton, Texas 76201

Dear Jerry:

In accordance with the review process set forth in Paragraph 350.7 of 44 CFR, Part 350, State responses to Regional Assistance Committee (RAC) comments on the State portion of the Texas Radiological Emergency Plan are herewith submitted for your consideration.

Responses to comments on local government plans for Hood and Somervell Counties will be forwarded under separate cover when available.

Reference your offer of a meeting with the RAC, we suggest that any such meeting be held in abeyance until you have had an opportunity to determine whether or not significant deficiencies exist in the State Plan as modified. If you determine that such a meeting is necessary, members of my staff and representatives from other involved State agencies will be happy to participate at a mutually agreeable time.

Please note that one copy of the Texas Department of Agriculture's Annex C to the State Plan is included in this subaission. That copy is being provided in reponse to a request from the United States Department of Agriculture reviewer, as expressed in his letter transmitting USDA comments to your agency.

Sincerely,

A handwritten signature in dark ink, appearing to read "Robert A. Lansford".

Robert A. Lansford
State Coordinator

RAL:jda

cc: Clarence L. Born, Texas Department
of Health

TEXAS RADIOLOGICAL EMERGENCY PLAN

Regional Assistance Committee Comments and State Response

A. Assignment of Responsibility (Organization Control)

PLANNING STANDARD:

Primary responsibilities for emergency response by the nuclear facility licensee, and by State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

A.1.a. EVALUATION CRITERION:

Each plan shall identify the State, Local, Federal and private sector organizations (including utilities), that are intended to be part of the overall response organization for Emergency Planning Zones.

COMMENT: (By Argonne National Laboratory)

- (a) The plan does not identify the Federal organizations that should be part of the overall response organization.

RESPONSE:

Section IV, on page 1 of Tab 1 Introduction states, beginning with the second sentence, "The State Plan and its annexes, the Federal Response Plan for Peacetime Nuclear Emergencies, and the Utility's emergency management plan are considered to be coequal to, and will be implemented in support of the emergency management plans of local governments affected by actual or potential off-site effects of nuclear power plant accidents." Further, Attachment 1 to Tab 1 Introduction, on page 9, contains a diagram entitled "Correlation of Plan Elements." That diagram lists both the Interagency Radiological Assistance Plan and the Federal Radiological Monitoring and Assessment Plan as being Federal contingency plans to be implemented as required in support of local emergency management plans.

Since the State plan identifies the Federal plan(s) to be implemented, and since the Texas Division of Emergency Management and the Federal Emergency Management Agency are identified elsewhere as the proper channel for requesting Federal assistance, the identity of specific Federal agencies providing that assistance is not significant for State planning purposes. Once the State has identified a need for assistance and has originated the appropriate request, it is FEMA's task to implement appropriate portions of the Federal plan(s), relaying the request to a Federal agency or agencies which can adequately respond.

COMMENT: (By Argonne National Laboratory)

(b) The only private sector response organization named is the American Red Cross, although universities and laboratories are given response assignments.

RESPONSE:

The American Red Cross is not a private sector response organization. Pursuant to Executive Order of the Governor WPC-11A, the American Red Cross is a full member of the Texas Emergency Management Council, and, as such, its capabilities and responsibilities are addressed in the State plan, as are those of all Emergency Management Council member agencies.

The State of Texas does not rely on private sector resources to accomplish its assigned mission of protecting lives and property. Contrary to the reviewer's interpretation, universities and laboratories are not given response assignments in the State plan. Information concerning the Texas A&M University laboratory and two University of Texas laboratories is included in Appendix 7, Tab 1 Introduction, but that inclusion is only information concerning their capabilities and willingness to assist; not an assignment of duties. Laboratory services are to be provided by the Texas Department of Health, Bureau of Laboratories. The university information is included simply to record the availability of additional resources should they be required.

A.1.e. EVALUATION CRITERION:

Each organization shall provide for 24-hour per day emergency response, including 24-hour per day manning of communications links.

COMMENT: (By Argonne National Laboratory)

The plan does not specifically state that each response organization can provide 24-hour per day response and manning of communication links.

RESPONSE:

The reviewer is absolutely correct. The plan does not contain that specific statement, nor is there any requirement that it do so. Neither the planning standard nor the evaluation criterion mentions a statement of this type. What they do seek is an assurance of a capability. This capability is achieved in the following manner.

Part One, Section V.B.2. of the State Plan, which the reviewer fails to note as a cross indexed reference, states on page 7 that each organization shall "develop detailed operating procedures and an alerting system for key personnel whose services would be required immediately upon implementation of any portion of this Plan." The reviewer is reminded that, under authority of the Texas Disaster Act, the preceding statement has the force and effect of law, as do all provisions of the Texas State Emergency Management Plan.

The reviewer's attention is also directed to Sections VI.C. on page 5 and VII.A.4. on page 7 of Annex L (see cross reference) which describes the specifics of that system as it exists in the Texas Department of Health, and to Section VI.C., pages 5 and 6 of Appendix 7, (also cross referenced) which enumerates the specific steps involved in receipt, evaluation and dissemination of notification.

A.2.a. EVALUATION CRITERION:

Each organization shall specify the functions and responsibilities for major elements and key individuals by title, of emergency response, including the following: Command and Control, Alerting and Notification, Communications, Public Information, Accident Assessment, Public Health and Sanitation, Social Services, Law Enforcement, Transportation, Protective Response (including authority to request Federal assistance and to initiate other protective actions), and Radiological Exposure Control. The description of these functions shall include a clear and concise summary such as a table of primary and support responsibilities using the agency as one axis, and the function as the other.

COMMENT: (By Department of Health & Human Services - HSA)

2-A - State Plan Annex L - very generally stated. Evidently the individual Bureaus and Divisions have their specific policies and procedures under which they function. This material had not been made available to the Reviewer.

RESPONSE:

We disagree for the following reasons:

- (a) The matrix chart and nine pages of text discussing this element is a very detailed presentation. It is definitely not a "general" statement. For each function which is a Department of Health responsibility, Annex L identifies the individual in charge, the Bureau or Public Health Region performing the service, and the rationale and scope of the Department's involvement.
- (b) Since the evaluation criterion does not address the question of how functions and responsibilities are to be accomplished, the missing "policies and procedures" of the various Bureaus and Divisions are not necessary for evaluation of this element. (However, see "c" below.)
- (c) Even though only one of the twelve Texas Department of Health appendices to Annex L was submitted for review, RAC members were advised in the formal briefing on June 17th that any or all of the other appendices would be provided upon request. Since the reviewer did not request any of the missing appendices, it would appear that his comment concerning their unavailability is premature.

[As an explanatory note, only the basic State Plan, Annex L (of 29 annexes) and Appendix 7 (of 12 appendices to Annex L) were submitted for review. To have included all annexes and appendices

would have added approximately 2000 more pages of text for each reviewer to evaluate. Since the excluded material has little direct bearing on the radiological aspects of fixed nuclear facility response, it was offered as being available upon request, but was not included in the formal review package provided to each reviewer.]

COMMENT: (By Department of Health & Human Services - FDA)

Fire Protection should be covered by the State, Texas Engineering Extension Service and Forest Service.

RESPONSE:

Fire protection is a responsibility of local government. No agency on the Texas Emergency Management Council has the capability or the responsibility for providing local fire protection services. The Engineering Extension Service and the Texas Forest Service provide some training for local firemen and some organizational assistance for rural and volunteer fire departments. These services are available to departments throughout the state, and have been offered to Hood and Somervell Counties in the past. The extent to which those jurisdictions have availed themselves of the services is beyond the control of the Texas Emergency Management Council.

Unlike such services as warning, medical support and radiological monitoring, fire protection needs are a local problem not directly related to radiological emergency response. The state does provide some augmentation for local Rescue operations, but a community's deficiency in the area of fire protection is a statement concerning its overall emergency management capability; not an evaluation of its ability to protect the public from the off-site effects of a radioactive release at a nuclear power plant. For this reason, while we agree that Hood and Somervell Counties could benefit from increased fire protection capabilities, we do not feel that the comment is germane to the subject of radiological emergency response.

A.3. EVALUATION CRITERION:

Each plan shall include written agreements referring to the concept of operations developed between Federal, State, and local agencies and other support organizations having an emergency response role within the Emergency Planning Zones. The agreements shall identify the emergency measures to be provided and the mutually acceptable criteria for their implementation, and specify the arrangements for exchange of information. These agreements may be provided in an appendix to the plan or the plan itself may contain descriptions of these matters and a signature page in the plan may serve to verify the agreements. The signature page format is appropriate for organizations where response functions are covered by laws, regulations or executive orders where separate written agreements are not necessary.

COMMENT: (By Environmental Protection Agency)

The Plan has been developed under the philosophy that most operations are required by statute, and special written agreements are not needed. It is assumed that accidents can be handled with State and local resources and that no Federal assistance will ever be needed or requested. This is hopefully correct, but it can never be assured. The Plan should at a minimum recognize that the need for Federal assistance, or a Federal presence, is at least possible, and assign responsibilities and authorities to appropriate staff, and establish procedures for requesting Federal assistance.

RESPONSE:

The State agrees that a Federal presence is possible, and has established procedures for requesting Federal assistance. See the State response to Argonne National Laboratory comment (a) under A.1.a.

The State disagrees with the reviewer's assessment that Texas intends to rely on State and local resources alone. For those few situations where State and local resources are not sufficient, Texas has secured the support of the other twelve states who are members of the Southern Mutual Radiation Assistance Plan. Also, even for those situations where State and local resources are completely adequate, Texas recognizes that Federal agencies will provide some support by meeting obligations imposed under their own respective emergency management plans. (See Appendix 7, Section IX - SUPPORT on pages 19 and 20.)

Finally, in addition to the procedures for requesting Federal assistance identified in the response under A.1.a. above, the State plan provides for Bureau of Radiation Control personnel to be present in the Licensee's Near-site Emergency Operations Facility where spaces are also provided for Federal Agency representatives. If Federal representatives are present, this arrangement will provide an opportunity for exchange of information and for identification of Federal assistance which might be available through various channels.

COMMENT: (By United States Department of Agriculture)

The Texas State Emergency Management Plan has written agreements between support organizations but does not include the use of USDA resources. Annex C, assigned to the Texas Department of Agriculture, was not received for review by this office.

RESPONSE:

Liaison with the USDA is the assigned responsibility of the Texas Department of Agriculture. Any utilization of USDA resources will be at the direction of, and conjunction with implementation of plans of the Texas Department of Agriculture. See Annex C. (A copy of Annex C will be provided in accordance with the USDA request.)

COMMENT: (By Department of Energy)

Although references to Federal response are made in several locations throughout the plan, there is no definitive planning guide specifying Federal response. NUREG-0654 directs that planning for Federal response be included even though there is no intention on the part of the State to include such resources in the emergency response resource requirements. In the event of an incident at any fixed nuclear facility in the State which affects the offsite area, Federal response will be in evidence without planning. We believe planning should be included to cover such an exigency.

RESPONSE:

We agree with the verdict, but feel that the wrong party has been found guilty. Our finding is that there is no definitive Federal planning for Federal response. Until such time as the Federal agencies have developed their own emergency management plans, any mention of specific Federal response in the State plan would be sheer conjecture. You tell us what you are prepared to do and we will include that information in our plans as appropriate. We will not fill the State plan with "definitive planning guidance specifying Federal response;" that information belongs in Federal plans. What we will include are provisions for interface with Federal agencies as soon as we know which agencies are involved and what they are capable of doing to aid the response effort.

B. Onsite Emergency Organization

Planning Standard:

On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.

B.2. EVALUATION CRITERION:

Each licensee shall designate an individual as emergency coordinator who shall be on shift at all times and who shall have the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations to authorities responsible for implementing offsite emergency measures.

COMMENT: (By Federal Emergency Management Agency)

While 0654 does not indicate nor require that this element should be addressed by State/Local governments you may wish to consider noting the individual (by title) at the licensee's facility who is responsible for initiating emergency actions, including recommendations regarding protective actions to offsite authorities.

RESPONSE:

No. That information would be meaningless to us for the following reasons.

- (a) The Shift Supervisor on duty is the Emergency Coordinator until replaced.
- (b) He is replaced by the Manager, Plant Operations or a designated alternate.
- (c) The designated alternates (line of succession) for Emergency Coordinator when the Manager, Plant Operations is unavailable is as follows:

Engineering Superintendent
Maintenance Superintendent
Operations Superintendent
Operations Engineer
Shift Supervisor, on duty

If an individual at the plant tells us he is the Emergency Coordinator, we are not going to challenge him. If the Licensee doesn't know who is in charge of his operation it is not our function to tell him. If he does know who is in charge, he will tell us.

C. Emergency Response Support and Resources

PLANNING STANDARD:

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.

C.1. EVALUATION CRITERION:

The Federal government maintains in-depth capability to assist licensees, States and local governments through the Federal Radiological Monitoring and Assessment Plan (formerly Radiological Assistance Plan [RAP] and Interagency Radiological Assistance Plan [IRAP]). Each State and licensee shall make provisions for incorporating the Federal response capability into its operation plan, including the following:

C.1.b. EVALUATION CRITERION:

specific Federal resources expected, including expected times of arrival at specific nuclear facility sites;

COMMENT: (By Argonne National Laboratory)

Sec. VI.B.4., Appendix 7 states that "Requests for Federal operational assistance are not anticipated". However, this does not necessarily preclude the need. Moreover NUREG-II.C.1. states that "Each state and licensee shall make provisions for incorporating the Federal response capability into its operation plan".

RESPONSE:

We feel that the comment is unjustified for the following reasons.

- (a) The Evaluation Criteria, including C.l.b. are guidance, not regulations. Regulations are contained in the Planning Standards, and Planning Standard "C" does not identify Federal resources as a type which must specifically be addressed.
- (b) The Planning Standard has been met by the incorporation of arrangements for requesting and effectively using the assistance resources of the Southern Mutual Radiation Assistance Plan (SMRAP) signatory states.
- (c) Provisions have also been included for requesting and using Federal assistance resources. [See State response to A.l.a. comment (a) by Argonne National Laboratory, and responses to A.3. comments by The Environmental Protection Agency, The United States Department of Agriculture, and The Department of Energy.] As noted in the State response to the A.3. comment by the Department of Energy, the type of detail requested in C.l.b. is not available to the State because it has not been provided by the involved Federal agencies.

C.l.c. EVALUATION CRITERION:

specific licensee, State and local resources available to support the Federal response, e.g., air fields, command posts, telephone lines, radio frequencies and telecommunications centers.

COMMENT: (By Environmental Protection Agency)

Neither EPA nor IRAP have been designated for potential support roles, since the need for Federal assistance is not anticipated.

RESPONSE:

The comment does not appear to refer to evaluation criterion C.l.c. If it is intended to apply to criterion C.l.b., as appears more appropriate, we still disagree with the assessment. Both IRAP and FRMAP are identified as Federal plans which may be implemented in conjunction with the State plan. [See response to A.l.a. comment (a) by Argonne National Laboratory.] If the Environmental Protection Agency is one of the agencies included in those plans, then it has been designated for a potential support role. If EPA is not included in either IRAP or FRMAP, then that information should have been communicated to State planners long ago by either the EPA or FEMA representatives on the Regional Assistance Committee.

C.3. EVALUATION CRITERION:

Each organization shall identify radiological laboratories and their general capabilities and expected availability to provide radiological monitoring and analyses services which can be used in an emergency.

COMMENT: (By Department of Health & Human Services - FDA)

In Tab 1, Ch. 1, Section V.c.5. (Page 7) describes the Bureau of Radiation Control's Mobile Lab capability. Tab 1, Section VII I., Page 8 refers to backup capability from University of Texas and Texas A&M, but does not give capabilities.

RESPONSE:

Since those capabilities are specifically enumerated in the letters of agreement with the laboratory facilities, we suggest that the reviewer look at the letters of agreement, which are referenced on page 8, and which are included in Tab 1, Introduction as Attachments 2 and 3 on pages 10 and 14 respectively.

COMMENT: (By the Nuclear Regulatory Commission)

Radiological laboratories are adequately described, however, I could not locate information describing the expected availability during an emergency.

RESPONSE:

While no such question concerning availability exists in the minds of State planners, we did contact personnel in charge of the backup laboratories in response to the reviewer's comment. Their response is now incorporated in Change 1 of Section VII I., on page 8 of Tab 1, Introduction:

"Both universities have stated that, during an emergency, their laboratories would be available with full staff and services, 24-hours per day or as needed, for the duration of the emergency."

C.4. EVALUATION CRITERION:

Each organization shall identify nuclear and other facilities, organizations or individuals which can be relied upon in an emergency to provide assistance. Such assistance shall be identified and supported by appropriate letters of agreement.

COMMENT: (By Environmental Protection Agency)

No outside assistance is anticipated other than that which might be obtained through the Southern Mutual Radiation Assistance Plan (except see C.3. above), or that which is provided by statute.

RESPONSE:

The reviewer's assessment is correct, but incomplete. It is also important to note why the State does not anticipate other outside assistance. The depth of personnel and equipment available within the State response organization, plus the backup resources available from twelve other states under SMRAP more than meet the stated intent of emergency planning; i.e., to "describe adequate means for protection of persons living within the emergency planning zones..." and to "provide reasonable assurance that appropriate protective measures can and will be taken by Texas State and local governments within the emergency planning zones in the event of a radiological emergency occurring at the Comanche Peak Steam Electric Station." Because their actions are compelled

by statute, the involvement of certain Federal agencies is also recognized in the Texas State plan, but no reasonable objective would be served by adding still other resources to this inventory. The scope of the State plan includes identifying and making provision for utilization of such resources as might reasonably be required, it does not include compilation of a listing of all available resources.

COMMENT: (By Argonne National Laboratory)

Sec. VI.B.4., Tab. 1 Introduction, Appendix 7, states that requests for Federal assistance are not anticipated but the Southern Mutual Radiation Assistance Plan is referenced.

RESPONSE:

The concern expressed in this comment appears to involve a misunderstanding of the State's intent to use or not to use Federal assistance. (See response to C.4. comment by Environmental Protection Agency, above.) Briefly stated, the State's position is that it will first attempt to provide any necessary response from within State resources. When State resources are found to be inadequate (which we feel will be a rare exception) Texas will first seek outside assistance from other members of the Southern Mutual Radiation Assistance Plan (SMRAP) before turning to the Federal Government for aid. Our intent is not to refuse Federal assistance, but rather to use our own resources and those of the other twelve states covered by SMRAP before we actively seek such Federal assistance.

COMMENT: (By Argonne National Laboratory)

Federal organizations that can be relied on for assistance should be named and letters of agreement included.

RESPONSE:

We disagree for the following reasons.

- (a) This is a State plan, addressing the utilization of State resources. Federal resources should be addressed in Federal plan which include an identification of the circumstances under which those resources would be used.
- (b) The evaluation criterion is an unreasonable condition which is not necessary to meet the planning standard. Referring to the standard, the requirement is that "Arrangements for requesting and effectively using assistance resources have been made," and "other organizations capable of augmenting the planned response have been identified." The State maintains that arrangements for requesting and effectively using needed assistance resources have been made, and that sufficient other organizations capable of augmenting the planned response have been identified. Nothing in the planning standard indicates any requirement to execute letters of agreement with those other (including Federal) organizations.

- (c) As indicated in our response to the comment by the Environmental Protection Agency (see above), the scope of the State plan does not include compilation of a listing of all available resources. If the reviewer feels that the identified resources are inadequate in any area, he should specify which types of resources are inadequate. If we concur, we will then add to the plan an agreement with some agency (Federal or otherwise) to ensure that appropriate additional resources are available.

E. Notification Methods and Procedures

PLANNING STANDARD:

Procedures have been established for notification, by the licensee of State and local response organizations and for notification of emergency personnel by all response 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.

E.1. EVALUATION CRITERION:

Each organization shall establish procedures which describe mutually agreeable bases for notification of response organizations consistent with the emergency classification and action level scheme set forth in Appendix 1. These procedures shall include means for verification of messages. The specific details of verification need not be included in the plan.

COMMENT: (By Department of Health & Human Services - FDA)

The only discussion of verification, Tab 1, Page 19, by the D.P.S. will be in accordance with SOPs. SOPs not available for review.

RESPONSE:

Notification is to be accomplished via a dedicated telephone line between Comanche Peak Steam Electric Station and the Department of Public Safety in Waco. Details concerning verification have been omitted from the public document for security reasons, and in accordance with the statement in the planning standard which exempts them from inclusion in the plan.

E.2. EVALUATION CRITERION:

Each organization shall establish procedures for alerting, notifying, and mobilizing emergency response personnel.

COMMENT: (By Nuclear Regulatory Commission)

- (a) Alerting and notifying personnel is adequately described but procedures for actually mobilizing emergency personnel are not. Procedures for assembling and briefing field teams at the Bureau Office (or elsewhere) should be described.

RESPONSE:

The concept of briefing field teams is inherent in the notification process. While only Bureau of Radiation Control teams appear to be included in the comment, the various State agencies will individually or collectively brief all members of the response team. Because of the many variables surrounding the Bureau's initial involvement in response operations, no one specific briefing procedure would be appropriate for all events. The selection of an assembly and briefing procedure will be left to the judgement of the Chief of Field Operations, based on the circumstances surrounding the incident.

COMMENT: (by Nuclear Regulatory Commission)

- (b) In the Accident Notification Sequence (Attachment 6 to Appendix 7, page 29), it appears that considerable time could elapse before the Bureau of Radiation Control is notified (i.e., it appears that 5 agencies are notified before the Bureau). However, it is noted that arrows on the sequence show an "alternate channel of notification". What does this mean? Is the notification of BRC timely?

RESPONSE:

The accident notification sequence shown in Attachment 6 to Appendix 7 is the standard notification sequence for all types of emergency, except that only those involving some radiological threat would ever reach the Bureau of Radiation Control. Except for precautionary notifications and followup notifications for information purposes, any notification would stop at the appropriate level of government, or with the appropriate agency or agencies involved. As a result, notification proceeds in the following manner.

1. Local Government is always notified first, or simultaneously with other agencies, because State assistance is requested only when a threat exists which is beyond the capability of local government to make effective response.
2. The DPS District Office is notified first when local government requests State assistance because all assistance is provided by the Disaster District if appropriate capabilities exist at that level.
3. DPS Headquarters is notified if the possibility exists that additional State or Federal assistance may be required, or if local jurisdictions in other Disaster Districts may be affected. DPS Headquarters Communications is responsible for notifying other DPS District Offices if their Disaster Districts are affected, and is also responsible for notifying the Division of Emergency Management if any State level assistance is required, including assistance to be obtained from Federal agencies.

4. The Division of Emergency Management is responsible for notifying any agencies at the State level whose assistance may be required, and for notifying the Federal Emergency Management Agency if Federal assistance requests are anticipated.
5. As one of the State agencies whose assistance may be required above the Disaster District level, the Texas Department of Health receives notification through its Disaster Response Program. The Disaster Response Program is responsible, within the Department of Health, for notifying any or all Bureaus whose assistance may be required, including, but not limited to the Bureau of Radiation Control. Since only a very small percentage of all emergencies involve any type of radiological threat, the Bureau of Radiation Control is not even notified of most emergencies.

Even in those emergencies where a potential or actual radiological hazard exists, that hazard may not constitute the most pressing need for assistance. Other, life threatening conditions may require a more immediate response by personnel from other agencies or from other bureaus of the Department of Health. It is therefore totally appropriate that notification follow the prescribed sequence; both because that sequence ensures that all required agencies will receive notification, and because the alternative would be to make the Bureau of Radiation Control responsible for subsequent notifications; something which the Bureau is neither responsible for, nor always capable of accomplishing.

Concerning the possibility that considerable time could elapse before the Bureau of Radiation Control is notified, and the question of whether such notification is timely, the reviewer is reminded of the following considerations, all of which are adequately spelled out in the State plan.

- A. Notification of local government occurs before the Bureau of Radiation Control is notified in any case, so there is no delay in issuance of warning to the public, regardless of how long Bureau notification is delayed.
- B. Responsibility for recommending protective actions lies with the Licensee until such time as Bureau recommendations are available, so Bureau involvement or lack thereof during initial stages of incident response is not a significant factor in that process either.
- C. Implementation of protective measures, specifically provision of evacuation assistance and reception and care of evacuees is the responsibility of other agencies and will be accomplished whether or not the Bureau of Radiation Control is involved.

Because initial services are provided by other agencies, notification of the Bureau of Radiation Control within the first thirty minutes versus notification within the first five minutes has no real impact on State and local response capabilities. In either case, notification of the Bureau is timely in that sufficient time remains for appropriate response after such notification is received.

The "alternate channel of notification" noted by the reviewer on Attachment 6 indicates the possibility that parties at any stage in the notification sequence may choose to contact the Bureau of Radiation Control directly, using the Bureau's 24-hour emergency telephone number. While this could certainly reduce the time interval between discovery of the event and notification of the Bureau, it would not ensure that all other involved agencies receive appropriate notification. For this reason, the alternate channel of notification is simply provided to permit direct contact with the Bureau, and does not relieve any agency of the obligation to also forward notification through the primary channel. For any accident or incident requiring implementation of the Texas State Emergency Management Plan, persons reporting directly to the Bureau of Radiation Control will also be advised to submit notification through primary warning channels.

E.5. EVALUATION CRITERION:

State and local government organizations shall establish a system for disseminating to the public appropriate information contained in initial and followup messages received from the licensee including the appropriate notification to appropriate broadcast media, e.g., the Emergency Broadcast System (EBS).

COMMENT: (By Argonne National Laboratory)

The local government plans and the Department of Public Safety Plan, Annex R, Appendix 2 cover dissemination of information to the public. However this information should also be in the state plan. Appendix R is not a part of the radiological emergency response plan. Appropriate material should be extracted from the Department of Public Safety and local plans and inserted in the state plan to make the radiological emergency plan more responsive to the needs of emergency response personnel.

RESPONSE:

The reviewer's comments are incorrect because Annex R is a part of the State Plan. All elements identified by the reviewer as necessary for making the radiological emergency plan more responsive to the needs of emergency response personnel are already included in those portions of the State Plan which are issued to the personnel responsible for their accomplishment. For the following reasons, we are rejecting his suggestions.

Texas has one State Emergency Management Plan. That plan includes the basic plan and the annexes of all agencies on the Texas Emergency Management Council, including Annex R (not Appendix R) of the Department of Public Safety.

Any portion or portions of the State Emergency Management Plan may be implemented as needed to respond to a particular type of threat. The so called "radiological emergency response plan" identified by the reviewer is simply that portion of the State plan which deals fairly specifically with the radiological aspects of emergency response. The interrelationships of all of the plan elements are illustrated in Part One, Attachment 3 of the basic State plan (as identified in the cross reference response to evaluation criterion A.l.c., and further amplified in the "Correlation of Plan Elements" which is included as Attachment 1 on page 9 of Tab 1, Introduction.) Attachment 2 to Appendix 7 (page 25) goes even farther in spoon feeding this information to the reviewer by providing a specific matrix showing State agencies' assignments which would be applicable to a radiological emergency response.

The Texas Emergency Management Council, and the Texas State Emergency Management Plan exist for the sole purpose of supporting the local government in its task of protecting the lives and property of the citizenry. While a general summary of local responsibilities is included in the basic State plan and a more detailed summary of local responsibilities with respect to radiological emergency response is contained in Tab 1, Introduction to Appendix 7, the reviewer and all other parties have been correctly instructed to refer to actual local government plans for specific information concerning local response.

E.6. EVALUATION CRITERION:

Each organization shall establish administrative and physical means, and the time required for notifying and providing prompt instructions to the public within the plume exposure pathway Emergency Planning Zone. (See Appendix 3.) It shall be the licensee's responsibility to demonstrate that such means exist, regardless of who implements this requirement. It shall be the responsibility of the State and local governments to activate such a system.

COMMENT: (By Argonne National Laboratory)
Comments in E.5. above apply.

RESPONSE:

Response in E.5. above applies. The basic State plan identifies who is responsible for doing what. This information is amplified for information purposes in the annexes of agencies who must interface with the responsible party, but the details of how a task is to be accomplished are included only in the annex of the agency responsible for carrying out that activity.

COMMENT: (By the Department of Transportation)
I did not find a figure showing the time required for notifying and informing the public.

RESPONSE:

Not being a State responsibility, this information is not included in the State plan. It is, however, specifically stated in Table 2 of Attachment G on page 209 of the Hood County plan and page 197 of the Somervell County plan.

E.7. EVALUATION CRITERION:

Each organization shall provide written messages intended for the public, consistent with the licensee's classification scheme. In particular, draft messages to the public giving instructions with regard to specific protective actions to be taken by occupants of affected areas shall be prepared and included as part of the State and local plans. Such messages should include the appropriate aspects of sheltering, ad hoc respiratory protection, e.g., handkerchief over mouth, thyroid blocking or evacuation. The role of the licensee is to provide supporting information for the messages. For ad hoc respiratory protection see "Respiratory Protective Devices Manual" American Industrial Hygiene Association, 1963, pp. 123-126.

COMMENT: (By Department of Health & Human Services - FDA)

This is included in local plans only on Pages 156-158, 227-231 and 167-168, 237-239.

RESPONSE:

As noted in the cross reference, the Bureau of Radiation Control will advise local government concerning protective measures, but message content, and its dissemination is the responsibility of local government. The reviewer is reminded that Evaluation Criterion E.7. is guidance only, as are all of the evaluation criteria. It would not be logical to include in the State plan sample messages which are the responsibility of local government to disseminate. Planning Standard E. requires only that "the content of initial and followup messages to response organizations and the public has been established;" and this has been done. The planning standard does not require that message content be included in plans to which it does not apply.

COMMENT: (By Argonne National Laboratory)

Responsibility for messages giving instructions to the public regarding protective actions are "delegated to the local governments who are responsible for message contents. However, NUREG-0654, II.E.7. states that messages "shall be prepared and included as part of the state and local plans."

RESPONSE:

See response to the comment by the Department of Health & Human Services - FDA, above.

F. Emergency Communications

PLANNING STANDARD:

Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

F.1. EVALUATION CRITERION:

The communications plans for emergencies shall include organizational titles and alternates for both ends of the communication links. Each organization shall establish reliable primary and backup means of communication for licensees, local, and State response organizations. Such systems should be selected to be compatible with one another. Each plan shall include:

F.1.a. EVALUATION CRITERION:

provision for 24-hour per day notification to and activation of the State/local emergency response network; and at a minimum, a telephone link and alternate, including 24-hour per day manning of communications links that initiate emergency response actions.

COMMENT: (By Argonne National Laboratory)

The cross reference cites Annex R and Annex AA for information about 24-hour notification and activation of state and local response networks. Appropriate sections of these annexes should be included in the state radiological emergency response plan, Appendix 7 to make the plan more convenient for emergency response personnel.

RESPONSE:

See comment E.5. by Argonne National Laboratory and the State response. Since the information is already in Annex R, and Annex AA, the annexes of the two State agencies with responsibility in this area, putting that same information in Appendix 7, which is not the state radiological emergency response plan, would serve no purpose. Appendix 7 is one appendix (for the Bureau of Radiation Control) of 12 appendices to Annex L (The Texas Department of Health's annex to the State plan), and governs only the activities of personnel from that Bureau.

F.1.b. EVALUATION CRITERION:

provision for communications with contiguous (s.c) State/local governments within the Emergency Planning Zones;

COMMENT: (By Argonne National Laboratory)

Comment F.1.a. applies.

RESPONSE:

State response to comment F.1.a. applies.

F.1.d. EVALUATION CRITERION:

provision for communications between the nuclear facility and the licensee's near-site Emergency Operations Facility, State and local emergency operations centers, and radiological monitoring teams;

COMMENT: (By The Nuclear Regulatory Commission)

Communication procedures are adequately described in the Hood County plan for local officials. However, a description of State communication procedures could not be located. There should also be a description of communication procedures for the field monitoring teams.

RESPONSE:

State communication procedures are the same for fixed nuclear facility response as for any other type of emergency response. The cross reference identifies the Department of Public Safety as the responsible State agency and all reviewers were told at the time the plan was submitted for review that the Department of Public Safety's annex was not included in the submission but was available for review upon request. Since the reviewer did not request a copy of the Department of Public Safety's Annex R, it is not surprising that he could not locate a description of State communication procedures.

Further, both Tab 1 Introduction and Tab 1 Chapter 1 clearly state that communications for the field monitoring teams are to be provided by the Department of Public Safety, so the same response applies to that part of the reviewer's comment as well.

G. Public Education and Information

PLANNING STANDARD:

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.

G.1. EVALUATION CRITERION:

Each organization shall provide a coordinated periodic (at least annually) dissemination of information to the public regarding how they will be notified and what their actions should be in an emergency. This information shall include, but not necessarily be limited to:

- a. educational information on radiation;
- b. contact for additional information
- c. protective measures, e.g., evacuation routes and relocation centers, sheltering, respiratory protection, radioprotective drugs, and
- d. special needs of the handicapped.

Means for accomplishing this dissemination may include, but are not necessarily limited to: information in the telephone book; periodic information in utility bills; posting in public areas; and publications distributed on an annual basis.

COMMENT: (By the Department of Health & Human Services - FDA)

This section is included in local plans only, Pages 117-118, 128 and 129.

RESPONSE:

Since it is entirely a local government responsibility, it is entirely reasonable that it is only addressed in the local plans.

G.4.a. EVALUATION CRITERION:

Each principal organization shall designate a spokesperson who should have access to all necessary information.

COMMENT: (By The Nuclear Regulatory Commission)

The local plan designates specific spokespersons by title, but the State plan refers only to "bureau personnel assigned this function." Who are the persons (titles) assigned to coordinate public and news media information?

RESPONSE:

This is not correct. The State plan identifies the Division of Emergency Management as having primary responsibility for emergency public information, and the Texas Department of Public Safety as having a support responsibility in this area. The cross reference to the State Plan refers the reviewer to Annexes AA and R for those agencies respectively, and to Annex L for their agency counterpart within the Texas Department of Health. Appropriate portions of Annexes AA and R (which were offered to the reviewer, but which he did not choose to request) identify the respective individuals for the Division of Emergency Management as the Emergency Information Planner and for the Department of Public Safety as the Public Information Officer. Further, Annex R identifies the responsible individual at the Disaster District level as the Safety Education Service Lieutenant of the Department of Public Safety. Annex L identifies the spokesperson for The Texas Department of Health as the Disaster Response Program representative to the Emergency Management Council. By job title, this individual is the Director, Disaster Response Program or his designee.

Concerning the Bureau of Radiation Control, Appendix 7 (which the reviewer incorrectly identifies as the State Plan) identifies the three individuals manning the three shifts as the Branch Administrator of the X-Ray and Nonionizing Radiation Inspection and Enforcement Branch (who served as Training Coordinator in the former Division of Occupational Health and Radiation Control), and two Information and Education Specialists from the Public Information and Training Program. The alternate for this position is the Project Director of the Public Information and Training Program in the Bureau's Office of Information, Education and Administration.

G.5. EVALUATION CRITERION:

Each organization shall conduct coordinated programs at least annually to acquaint news media with the emergency plans, information concerning radiation, and points of contact for release of public information in an emergency.

COMMENT: (By Argonne National Laboratory)

Coordinated programs for the news media are shown in the cross reference as responsibilities of the local governments. However, the reference in the local plans make no mention of coordinated programs for the media.

RESPONSE:

Since this is (and is noted by the reviewer to be) a local responsibility, we question the presence of this comment among these addressing the State plan. In response, however, we do submit the following for the reviewer's consideration.

Evaluation Criterion G.5., like all of the evaluation criteria, is guidance, not regulation, and therefore does not need to be specifically addressed; in either the State or local plans. It has, however, been adequately addressed because the elements of the planning standard have been met. Local plans do contain provisions for making information available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency. Since those provisions call for dissemination of this information to the public via the public news media, the media will have been provided all necessary information if they will only read or listen to the very information which they are broadcasting to the public.

Further, the principal points of contact with the news media for dissemination of information during an emergency have been very specifically identified in both State and local plans, and the procedures for coordinated dissemination of information to the public through the public news media have been established.

Finally, since both the Hood and Somervell County plans specifically address jointly sponsored public meetings to be conducted at least annually for the purpose of providing an opportunity for the public to ask questions and provide suggestions, it seems reasonable that the public news media can also use those public meetings to ask questions and to provide suggestions if they feel that they are not receiving the type of information they require. If the public education and information provisions of the local plans are adequate for the general public, they should certainly be adequate for the public news media, who are after all supposed to be professionals in the business of gathering information.

H. Emergency Facilities and Equipment

PLANNING STANDARD:

Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

H.4. EVALUATION CRITERION:

Each organization shall provide for timely activation and staffing of the facilities and centers described in the plan.

COMMENT: (By Argonne National Laboratory)

Part II Section III.A.3., Section III.B.1. and Section III.B.2. provide for the timely activation of the EOCs. Attachment 5 to Appendix 7 gives the emergency recall procedures for the field teams and EOC liaison staff. The plan Part II Section III indicates that the state coordinator of the Division of Emergency Management and the Disaster District 6A committee chairman activate the Emergency Management Council. The council members are responsible for procedures to maintain operational capability. These procedures should be made a part of the plan.

RESPONSE:

The procedures are a part of the plan. As has been explained in response to numerous prior comments, Texas has one plan. The annex of each agency on the Texas Emergency Management Council is a part of that plan, and each annex contains the procedures which address how that agency is to maintain operational capability.

H.7. EVALUATION CRITERION:

Each organization, where appropriate, shall provide for offsite radiological monitoring equipment in the vicinity of the nuclear facility.

COMMENT: (By Argonne National Laboratory)

Offsite radiological monitoring equipment is briefly described but no listing or specific description is given. A list of all monitoring equipment giving make and model number, radiation detected, range and other descriptive information should be included (i.e., such lists are given for backup labs like the UT TRIGA facility).

RESPONSE:

None is required by this element. However, the Bureau has dedicated over 25 Ludlum 14-C's (with 12 Alpha and gamma scintillation probe sets); a 30 per cent Intrinsic Germanium system; 15 High Volume air Samplers; Sodium Iodide analyzer system; and a Phoswich proportional system to the emergency response organization. This in addition to other assets available within the Bureau of Radiation Control and the Bureau of Laboratories.

H.10. EVALUATION CRITERION:

Each organization shall make provisions to inspect, inventory and operationally check emergency equipment/instruments at least once each calendar quarter and after each use. There shall be sufficient reserves of instruments/equipment to replace those which are removed from emergency kits for calibration or repair. Calibration of equipment shall be at intervals recommended by the supplier of the equipment.

COMMENT: (By Argonne National Laboratory)

The State plan calls for semi-annual calibration of instruments. Instrument reserve capability cannot be determined without an inventory list.

RESPONSE:

Equipment used to support an accident at a Nuclear Facility by the Bureau of Radiation Control is in daily use throughout the state. Tab 1, Chapter 1, Attachment 6 (page 21) is a minimum listing of equipment available to each monitoring team. Reserve stocks of all items are maintained for use by the teams. Additionally, Ludlum Measurements, Inc., Sweetwater, Texas, has on file with the Bureau an agreement to provide additional instruments, technical support, repair, and calibration services that may be requested during an emergency. A copy of this agreement is attached; nothing is gained by including it within the plan.

H.11. EVALUATION CRITERION:

Each plan shall, in an appendix, include identification of emergency kits by general category (protective equipment, communications equipment, radiological monitoring equipment and emergency supplies).

COMMENT: (By Environmental Protection Agency)

Radiological monitoring kits do not specifically include operating manuals for equipment, check sources, or site maps.

RESPONSE:

We agree, a change has been made to reflect this comment, see Change 1 to Tab 1, Chapter 1, page 21 (attached).

COMMENT: (By Argonne National Laboratory)

Tab. 1, Chapter 1, Attachment 6 lists monitoring team equipment. In general, this is an excellent set of instruments. However, there is one deficiency. The Ludlum 14C meter uses a GM tube on the X 1000 range (0 to 2 R/hr). According to the manufacturer, if the radiation level is more than about 8 R/hr the GM tube avalanches and the meter reading will go to zero. A high range, non overloading type meter (e.g. ion chamber) is needed for measurements of high radiation levels in the plume for serious emergencies.

RESPONSE:

During the response to a design basis accident, offsite radiation levels will not exceed Ludlum 14-C capabilities. However, the Bureau of Radiation Control has 25,802 ion chamber survey meters in its RADEF program. Approximately 15,000 are distributed to communities in Texas with the remaining 10,000 available for use and stored in Austin. Each of the instruments has a range of 0-500 R/hr. All are available for use during an accident response.

H.12. EVALUATION CRITERION:

Each organization shall establish a central point (preferably associated with the licensee's near-site Emergency Operations Facility), for the receipt and analysis of all field monitoring data and coordination of sample media.

COMMENT: (By Argonne National Laboratory)

Tab. 1 Chapter 1 Section V.C.2.4.5., and 6 describe adequately the collection and processing of samples and field data. No location for the field van (mobile laboratory) is given. It should be conveniently located with respect to the EOF.

RESPONSE:

As identified in the cross reference to Appendix 7, Tab 1 Chapter 1: Section V.C.4. states, in the last sentence, "The Sample Coordinators will work in proximity to the Bureau's mobile laboratory, next to the Utility's Near-site Emergency Operations Facility. The reviewer's comment must be the result of an oversight on his part because the plan states exactly what he suggests.

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.

I.7. EVALUATION CRITERION:

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.

COMMENT: (By Argonne National Laboratory)

The field monitoring teams are well equipped except for the lack of a high range non overloading survey meter. (See comment for item H.11.).

RESPONSE:

This is essentially the same comment made concerning H.11., therefore the response is also the same. During the response to a design basis accident, offsite radiation levels will not exceed Ludlum 14-C capabilities. However, the Bureau of Radiation Control has 25,802 ion chamber survey meters in its RADEF program. Approximately 15,000 are distributed to communities in Texas with the remaining 10,000 available for use and stored in Austin. Each of the instruments has a range of 0-500 R/hr. All are available for use during an accident response.

I.8. EVALUATION CRITERION:

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.

COMMENT: (By Nuclear Regulatory Commission)

The plan only partially addresses this element. The USEPA "Manual of Protective Action Guides and Protective Actions for Nuclear Accidents" is referenced, but the plan contains no specific information regarding procedures to be used by the Bureau of Radiation Control. For example, there should be information on computer, or calculator programs (if used), isopleths, recording data supplied by the licensee, use of meteorological data, and any deviations from EPA procedures that may be used. Also, no information is provided regarding team communications or estimated deployment times.

RESPONSE:

Tab 1:FNF Response, Chapter1:CPSES, pages 7 & 8 describe the computer analysis system used by Bureau personnel to assess an accident at Comanche Peak. The mini-computer will have installed software capable of plume projection, dose estimates, and organ dose evaluations. Methodology contained within the EPA's Manual of Protective Actions and Guides, is very adequate when used as a backup to a computer based system. The Accident Assessment Team is composed of twelve members (three shifts of four). Thus far, eight members of the team have completed the FEMA sponsored Radiological Accident Assessment Course. At least two members of each shift are course graduates. Remaining team members will attend the course as seats are made available by FEMA. All Bureau graduates of the course are capable of making manual estimates using EPA guide 520/1-75-001 Rev. 6-80. Therefore, additional procedures would tend only to lengthen not strengthen the Plan.

Isopleths and nomograms are available for use by persons performing manual dose and plume projections. These are included in the Accident Assessment team's packet of reference materials, but, because they are over-sized and would be damaged by folding and punching, they were not included in the plan.

Meteorological data will be supplied to the Bureau of Radiation Control by CPSES.

Department of Public Safety responsibilities including communications are shown on Attachment 3 to Part 1 of the basic State Emergency Management Plan. Within Appendix 7, communications support is discussed within each of the following areas:

- o Tab 1, FNF Response, Introduction, paragraph VII.B.5., page 5
- o Tab 1, FNF Response, Chapter 1:CPSES, paragraph V.B.1., page 6
- o Tab 1, FNF Response, Chapter 1:CPSES, paragraph V.C.2., page 6

- o Tab 1, FNF Response, Chapter 1:CPSES, paragraph V.C.3., page 7
- o Tab 1, FNF Response, Chapter 1:CPSES, Attachment 6, page 21

Response time by the Bureau to an accident at CPSES is a function of the notification, assembly and transport times, as well as the accident classification. The first full shift should arrive at the scene within four hours of notification. Remaining team members will arrive prior to the first shift change.

COMMENT: (By Argonne National Laboratory)

Most of the items for Item I.8. are adequately covered in Tab. 1, Chapter 1 Section IV and V. However, there are concerns about the estimated deployment time of 4 hours especially in a rapidly escalating emergency. Section IV clearly gives the individual assigned to Utility Liaison the task of obtaining data to evaluate the event and to advise the Bureau Chief, the Chief of Field Operations and the Accident Assessment Team Leader. Procedures should be developed that provide for activation and deployment at the earliest appropriate time.

RESPONSE:

Procedures do provide for activation and deployment at the earliest appropriate time. Section IV, on page 4 of Tab. 1, Chapter 1, clearly states that "Bureau response to any warning from CPSES will be related to, but not limited by, the Utility's estimate of severity. The Bureau will consider such other factors as the degree of uncertainty (that the event will or will not progress to a more severe accident category) and the lead time required to position Bureau response personnel should something more serious develop."

The 3 to 4 hour deployment time (cited by the reviewer as 4 hours) may, in some instances, be measured from notification of an Alert or a Site Area Emergency. In those cases, it is possible that deployment will have been completed before an incident even reaches the General Emergency category.

Without developing the skill of prophecy, and without moving the plant closer to Austin (160 miles) or permanently stationing our team closer to the plant, we feel that the state plan makes every reasonable provision for activation and deployment at the earliest appropriate time.

The reviewer is also reminded that our plan makes provisions for Bureau involvement during the deployment period. Information provided by the Utility will be evaluated constantly during this period, and recommendations based on the Utility's data will be provided by our Accident Assessment team until such time as our own field teams are deployed and begin gathering data of their own.

I.9. EVALUATION CRITERION:

Each organization shall have a capability to detect and measure radiiodine 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.

COMMENT: (By Nuclear Regulatory Commission)

Specific information concerning radiiodine monitoring could not be located in the plan.

RESPONSE:

The Bureau of Radiation Control has, within the plan, listed a system capable of "detecting radiiodine in air as low as 10^{-7} microcuries/cc under field conditions." While not directly stated, a 30 per cent Intrinsic Germanium System evaluating a silver zeolite air sample cartridge has a sensitivity on the order of at least 10^{-10} microcuries/cc for Iodine-131.

I.10. EVALUATION CRITERION:

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.

COMMENT: (By Environmental Protection Agency)

Procedure 1 merely references EPA's Manual of Protective Actions and Guides for dose conversion techniques and Attachment 4 to Procedure 1 lists levels for key nuclides in the ingestion pathway. While the methodology is thus included by reference, the Plan would be improved greatly if explicit details were to be included to make the dose projections. Consideration should be given to including nomograms.

EPA's National Interim Drinking Water Regulations are not intended for application to accident or short term situations, but rather chronic long-term exposures. Consequently, the Appendix B levels of nuclides which correspond to 4 mrem/yr annual dose are those calculated for the 50th year of exposure. This makes little or no difference for short half-life nuclides, but can be important for long-life nuclides, and can lead possibly to excessive conservatism in some cases. Procedure 1 will be improved if it is revised to clarify this point. Also, as with the PAG dose conversions incorporated by reference, the Procedure will be further improved if explicit procedural details are added for this pathway.

RESPONSE:

Tab 1:FNF Response, Chapter 1:CPSES, pages 7 & 8 describe the computer analysis system used by Bureau personnel to assess an accident at Comanche Peak. The mini-computer will have installed software capable of plume projection, dose estimates, and organ dose evaluations. Methodology contained within the EPA's Manual of Protective Actions and Guides, is very adequate when used as a backup to a computer based system. The Accident Assessment Team is composed of twelve members (three shifts of four). Thus far, eight members of the team have completed the FEMA sponsored Radiological Accident Assessment Course. At least two members of each shift are course graduates. Remaining team members will attend the course as seats are made available by FEMA. All Bureau graduates of the course are capable of making manual estimates using EPA guide 520/1-75-001 Rev. 6-80. Therefore, additional procedures would tend only to lengthen not strengthen the Plan.

Isopleths and nomograms are available for use by persons performing manual dose and plume projections. These are included in the Accident Assessment team's packet of reference materials, but, because they are over-sized and would be damaged by folding and punching, they were not included in the plan.

We agree that the National Interim Drinking Water Regulations are not intended for use during short term situations. However, Federal guidance by EPA or other responsible agencies has yet to be issued. Pending issuance of applicable regulations, an overly conservative long-term guide is desirable. The short-term consequences of a waterborne release are minimal at the CPSES site. Squaw Creek Reservoir is not used as a source of drinking water, and by procedure is to be evacuated if a site area emergency is declared by the utility.

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.

J.9. EVALUATION CRITERION:

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 (re FR 58790).

COMMENT: (By Department of Health & Human Services - FDA)

The state and Counties have capabilities for implementing protective measures. The Department of Agriculture Plan and Department of Health, Appendices 2 and 9 to Annex L were not available for review.

RESPONSE:

The Department of Agriculture's Annex C to the State Plan and the Department of Health's Appendices 2 and 9 were available for review. The reviewer, along with all other members of the RAC, was told at the time of formal submission that any of these other annexes and appendices would be provided if he would simply specify which ones he wanted to see. Since the reviewer never requested any of these additional documents, the State planners had no indication that he wanted to see them.

In view of the first part of the reviewer's comment that "The state and Counties have capabilities for implementing protective measures", we are unsure whether he feels any deficiency exists. If he does, we will supply copies of Annex C and Appendices 2 and 9 to Annex L upon request. If he does not request those documents we will assume that their summarization in Tab 1 Introduction to Appendix 7 was adequate for his purposes and that the matter is resolved.

J.10. EVALUATION CRITERION:

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

J.10.a. EVALUATION CRITERION:

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);

COMMENT: (By the Department of Transportation)

There was no map showing relocation centers in host areas or shelter areas. These might be included in the Crisis Relocation Plan. This should be verified.

RESPONSE:

These are a local government responsibility, as was noted in the cross reference. The reason the reviewer did not find maps of the relocation centers and shelter areas in local plans of Hood and Somervell Counties is that the relocation centers and shelter areas are not in those counties. Johnson County, to the east of the EPZ, and Erath County, to the west, have been designated as the primary hosting jurisdictions for evacuees from the CPSES 10-mile plume exposure pathway EPZ. Appropriate maps are located in the local government plans of those counties. Appropriate maps will also be included in public information materials to be distributed to residents of the 10-mile EPZ.

J.10.b.EVALUATION CRITERION:

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

COMMENT: (By Argonne National Laboratory)

Maps giving the required information should be available in the State EOC and District EOC for reference. They should be included in the state plan document.

RESPONSE:

Large maps showing this information are included in the data display packets which will be available in both the State and Disaster District EOC's. This was not noted in the State plan simply because details of maps, charts, and other data display items are beyond the scope of that document. It is, however, noted in the Standing Operating Procedures for the State EOC and the Disaster District 6A EOC (in Waco). Further, copies of the actual local plans for Hood and Somervell Counties are also on file in each of those EOC's, so incorporation of any specific information from those local plans in the State Plan would be redundant.

J.10.e.EVALUATION CRITERION:

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.

COMMENT: (By Department of Health & Human Services - FDA)

K.I. use will be recommended for emergency workers and institutionalized persons. The quantity of K.I. and the distribution are not provided for in the plans.

RESPONSE:

As noted in the cross reference to Appendix 7, K.I. will be maintained for State personnel and institutionalized persons by the Utility at its EOF. The Utility plan is being modified to show that 250 doses of K.I. are maintained for use by State personnel (including institutionalized persons). Since local plans state that the number of institutionalized persons who could not readily be evacuated is very small, we feel that the 250 available doses of K.I. will be adequate under most emergency conditions, and would suffice until additional supplies could be obtained under the most extreme conditions. Distribution will be via team leaders for State personnel, and via either local or State medical personnel for institutionalized persons.

J.10.g.EVALUATION CRITERION:

Means of relocation;

COMMENT: (By Department of Transportation)

Attachment J, Transportation Resources needs to be completed.

RESPONSE:

Attachment J is a local plan attachment and therefore a local responsibility.

J.10.h.EVALUATION CRITERION:

Relocation centers in host areas which are at least 5 miles, and preferably 10 miles, beyond the boundaries of the plume exposure emergency planning zone: (See K.8.)

COMMENT: (By Department of Transportation)

Not shown in local plans. Presume these are included in Crisis Relocation Plan.

RESPONSE:

See response to J.10.a., above. Since there is no Evaluation Criterion K.8., we are unable to determine what that note at the end of J.10.h. means.

J.10.m.EVALUATION CRITERION:

The basis for the choice of recommended protective actions from the plume exposure pathway during emergency conditions. This shall include expected local protection afforded² in residential units or other shelter for direct and inhalation exposure, as well as evacuation time estimates.

COMMENT: (By Health & Human Services - FDA)

The basis for the choice of recommended protective actions are in the States', Tab 1, Ch. 1, Procedure 1. There was no reference to the protection afforded by the shelters for direct and inhalation exposures and no evacuation time estimates.

RESPONSE:

Since the protection afforded by single family residences, business structures and public buildings varies so greatly, we feel that any attempt to assign an overall value to this type of protection would be essentially meaningless. We will recommend sheltering only when evacuation is not a practical alternative; either because the duration of exposure is expected to be very short, or because the individual can not readily be moved. In any case, sheltering, as recommended by the State will be only the exercise of good ALARA. We take no credit in dose reduction for any sheltering which may be implemented within the plume exposure pathway EPZ.

Evacuation time estimates are specifically stated in local plans. (See response to comment E.6. by the Department of Transportation, and see Table 2 of Attachment G on page 209 of the Hood County plan and page 197 of the Somervell County plan.)

J.11. EVALUATION CRITERION:

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 foodstuffs. 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.

COMMENT: (By United States Department of Agriculture)

The State plan assigns to the Texas Department of Agriculture the development and maintenance of maps for recording survey and monitoring data, key land use data (e.g., farming), food processing plants, and dairies. The maps should 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 large amounts of food or agricultural products (originating in the ingestion pathway EPZ, but located elsewhere) should also be maintained. A listing of these maps stating their availability, location, and plans for their use would be sufficient. Annex C of the plan which is assigned to the Texas Department of Agriculture was not received for review.

RESPONSE:

The various maps and lists identified in the preceding comment are the responsibility of the Texas Department of Agriculture; and are contained or referenced as appropriate in that agency's annex (Annex C) to the Texas State Emergency Management Plan. As noted in the response to the USDA comment concerning evaluation criterion A.3., a copy of Annex C will be provided.

COMMENT: (By Department of Health & Human Services - FDA)

Did not see any land use maps, detailed crop information maps and maps of food processing facilities that process and products in the 50 miles EPZ. The Tab 1: Introduction, Page 7, states that the responsibility for maps used for recording survey and monitoring data and key land use data, will be with the Department of Agriculture.

RESPONSE:

See response to Department of Agriculture above. These maps and the accompanying lists of crop, dairy, food processing plant and related information are to be provided to the State EOC and the Disaster District EOC by the Texas Department of Agriculture upon request; with support provided by various Bureaus of the Texas Department of Health, and by the Texas Department of Water Resources. Each agency or bureau identifies in its own planning documents, the types of data it is responsible for providing.

J.12. EVALUATION CRITERION:

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.

COMMENT: (By Environmental Protection Agency)

Monitoring equipment at relocation centers is apparently the Civil Defense instruments. I finally located monitoring procedures in Attachment H of the CPSES, but I never did find it indexed anywhere. Monitoring equipment should be specified.

RESPONSE:

This is a good point. While this information is contained in Annex D (RADEF) of local plans, it should probably be either repeated or referenced in Attachment H to Annex F of local plans. (See local planners' response to comments for specific provisions, but note also that Tab. 1, Chapter 1, Section V.C.8. of the Bureau of Radiation Control's Appendix 7 identifies the instrumentation to be provided by each of the 10 members of the Bureau's Decontamination Assistance team. This instrumentation consists, per team member, of one Ludlum Model 14-C portable survey meter, one Ludlum Model 44-6 Thin Wall Gamma Probe, one Ludlum Model 44-2 High Energy Gamma Scintillator, one Ludlum Model 44-3 Low Energy Gamma Scintillator, and one Ludlum Model 43-2 Alpha Scintillator. Monitoring instrumentation to be used by local personnel consists of the Civil Defense CDV-700 instrument or equivalent.)

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.

K.3.a. EVALUATION CRITERION:

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.

COMMENT: (By Argonne National Laboratory)

Tab. 1 Chapter 1 Section V.C.7. states that the Bureau of Radiation Protection will provide personal dosimetry devices for all emergency workers and members of the public who must enter an exclusion area. Tab. 1 Chapter 1 Attachment 8 - Emergency worker radiation exposure record has provisions for both TLD and pocket dosimeters. Provisions for early distribution from local sources need to be developed so that local workers are covered during the estimated 4 hour deployment time at the beginning of an emergency.

RESPONSE:

The local plans are being changed to reflect that early distribution of TLDs and pocket dosimeters from local sources will be accomplished upon receipt of, or in anticipation of receipt of notification of a General Emergency involving CPSES.

K.3.b. EVALUATION CRITERION:

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.

COMMENT: (By Argonne National Laboratory)

Procedures should be developed for emergency workers to report dosimeter readings frequently to their EOCs. This is especially important for field monitoring teams who go into the plume. Additional procedures requiring notification to the EOC by a worker when his dose has reached a specified level (e.g. 1 R) should be in place. A special set of instructions should be available for a member of the public who must go into an exclusion area. The record form Tab. 1, Chapter 1, Attachment 8 is good but the exposure information is not available until the individual leaves the exclusion area.

RESPONSE:

This is not a requirement of NUREG-0654, but of good Health Physics practice and ALARA. Emergency workers, including any member of the general public permitted to enter the exclusion area, will be instructed to check their dosimeters frequently, and to report exposures in excess of 500 mrem to the Contamination Control Team. The exposure form, Tab. 1, Chapter 1, Attachment 8, has been changed to reflect this. (copy attached)

K.4. EVALUATION CRITERION:

Each State and local organization shall establish the decision chain for authorizing emergency workers to incur exposures in excess of the EPA Protective Action Guides (i.e., EPA PAGs for emergency workers and lifesaving activities).

COMMENT: (By The Environmental Protection Agency)

I could not find specific reference to the authority who can authorize emergency exposures of workers to doses in excess of the PAG's. Evidently excess exposures are not to be permitted.

RESPONSE:

Through oversight, this item was left out of the cross reference final copy. The correct citation is: Tab 1, Chapter 1, Procedure 1; item (c), on page 1-9. The text of this section, which describes PAG's for emergency workers, states that:

"Whole body projected doses of 25 to 75 Rem: (Note: Thyroid projected doses may not be a limiting factor for lifesaving missions.)

- . Only lifesaving or essential missions will be considered between these dose levels. These missions will be undertaken only with the authorization of the principal elected official of the involved jurisdiction, and the informed consent of the emergency worker.
- . Between these dose levels, exposure limitations used in conjunction with other exposure control measures may prove to be the most effective means to protect workers."

As the reviewer has concluded, we do not intend to permit excess exposures on a prior approval basis. The number of persons available within the state and local response organizations will almost always allow rotation of personnel with sufficient frequency to keep individual exposures below 25 Rem. In cases where that is not possible, the Mayor or County Judge at the local level, or the Governor (or his authorized representative) at the the State level must authorize any activity which is projected to result in an exposure in excess of 25 Rem.

COMMENT: (By Argonne National Laboratory)

A statement of who authorizes emergency workers to exceed the PAGs and under what circumstances was not found.

RESPONSE:

See response to the Environmental Protection Agency's comment, above.

K.5.a. EVALUATION CRITERION:

Each organization as appropriate, shall specify action levels for determining the need for decontamination.

COMMENT: (By Argonne National Laboratory)

Reference Tab. 1 Chapter 1 Procedures 1, 4, 5 and 6 give the required action levels. Reference is made to a Texas Department of Health Guideline which should be included in the plan as part of Procedure 4.

RESPONSE:

The Surface Contamination Levels tables and footnotes portion of that guideline are already included as Attachment 5 to Procedure 1 (on pages 1-30 & 31), and are identified as such in the concluding paragraph of the Procedure 1 text on page 1-21. For the sake of completeness, Attachment 5 is being expanded to include this guideline in its entirety. Since each member of the Bureau's response team is issued a complete set of all procedures, it is not necessary to reproduce this guideline in each individual procedure.

L. Medical and Public Health Support

PLANNING STANDARD:

Arrangements are made for medical services for contaminated injured individuals.

COMMENT: (By Department of Health & Human Services - HSA)

This again relates to specific operational plans and procedures to be provided by the Bureau of Emergency Management. This material has not been made available to the Reviewer. Can not evaluate.

RESPONSE:

The specific operational plans and procedures noted by the reviewer were to be provided by the Division of Emergency Management, not the Bureau of Emergency Management (which is a completely different entity). The reason they were not made available to the reviewer is that he never requested them. All members of the RAC were told, in the June 17th meeting at FEMA Region VI headquarters, in the State's letter of transmittal for the review package, and again in FEMA's instructions to the reviewers, that additional items were available for review upon request; but that they had not been included in the initial submission because of their limited application to FNF response, and because of the unnecessary volume of materials which they would add to other reviewers' copies of the plan.

Since the reviewer did not request materials which he felt to be necessary for his review, and since he submitted no specific comments concerning Planning Standard L Evaluation Criteria, we can only address comments of other reviewers who noted specific items and hope that this approach will also answer any unvoiced questions the Health Services Administration reviewer may have.

L.1. EVALUATION CRITERION:

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.

COMMENT: (By The Nuclear Regulatory Commission)

The local plans describe the general capabilities of the county hospitals. However, a list of supporting hospitals was being developed and was not yet included in plans.

RESPONSE:

See local government planners' responses to this comment, but also note that two backup hospitals are identified in the State plan on page 11 of Tab 1, Chapter 1 to Appendix 7.

L.3. EVALUATION CRITERION:

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 (sic) personnel, and have facilities and trained personnel able to care for contaminated injured persons.

COMMENT: (By the Nuclear Regulatory Commission)
The hospital list is under development.

RESPONSE:

See the attached copy of Attachment 9 to Tab 1, Chapter 1, pages 24 & 25 (New Attachment). This list is not all-inclusive, but identifies a backup medical capability sufficient to meet any anticipated needs resulting from an accident at the Comanche Peak Steam Electric Station.

COMMENT: (By Argonne National Laboratory)

Appendices 3, 11 and 12 of Annex L list hospitals capable of providing medical support for contaminated injured personnel. Extractions from these appendices as appropriate should be included in the plan for convenience of emergency response personnel.

RESPONSE:

We agree, but for an entirely different reason. By being in appendices 3, 11 and 12 of Annex L, these items are already in the plan, which contains all annexes and appendices of all agencies on the Council. We have chosen to remove this list of hospitals from appendices 3, 11 and 12, and include them in Appendix 7 because the information they contain would be of use only in response to a radiological emergency. See new Attachment 9 to Tab 1, Chapter 1.

COMMENT: (By Federal Emergency Management Agency)

(a) (Appendix 3, 11 and 12 to Annex L. Appendix 3 contains functional statement for Bureau of Emergency Management. Appendix 11, Public Health Regions functional statement "to be developed". Appendix 12, Functional statement for licensing and certification.)

RESPONSE:

The reviewer is confused. Appendix 3 does not contain the functional statement for the Bureau of Emergency Management. Annex L contains this functional statement, along with the functional statements for each of the other Bureaus having emergency management responsibilities under Annex L. The functional statement for the Public Health Regions is to be developed, as the reviewer noted; but since a functional statement is merely a very short narrative of assigned responsibilities, and since those responsibilities are already discussed in the text of Annex L and summarized in the matrix which is Attachment 5 to

Annex L, all pertinent information was in the hands of the reviewer and the lack of a short, prominently labeled paragraph summarizing that information should not have presented the reviewer with an insurmountable handicap.

COMMENT: (By Federal Emergency Management Agency)

(b) Tab. 1, Chapter 1 Page 10, item 9 lists 3 hospitals capable of handling radioactivity contaminated individuals. Hospitals have agreed to accept these individuals. Hospitals do not have letters of agreement (local plans?). How many radioactively contaminated individuals can the hospitals handle at one time?

RESPONSE:

Hospitals do have letters of agreement with their local governments, except for Hood General Hospital in Granbury. Hood General Hospital is a county-owned facility; therefore no such letter of agreement is required. (See Change 1 to page 11 of Tab 1, Chapter 1, and new Attachment 9 on page 24). The three hospitals' bed capacities are:

Hood General Hospital, Granbury	40 beds
Stephenville Hospital, Stephenville	98 beds
Johnson County Mem. Hosp., Cleburne	186 beds.

Concerning their capability to handle a specific number of radioactively contaminated individuals at one time, this will vary greatly depending on the type of contamination and the type and extent of injuries involved. Without first defining those parameters, any statement of capacity would be meaningless, so no such numbers were sought by State planners.

L.4. EVALUATION CRITERION:

Each organization shall arrange for transporting victims of radiological accidents to medical support facilities.

COMMENT: (By Argonne National Laboratory)

Comment for L.3. above applies.

RESPONSE:

We disagree; and we disagree with the evaluation criterion as well. Planning Standard L only requires that "Arrangements are made...", it does not specify that both State and local plans must contain this information, and we feel that L.4. is inappropriate to the State plan because:

Transportation of accident victims (of any type) is a responsibility of the local Emergency Medical Service, and is covered in local Emergency Management plans. Coverage of that service in the State plan would be no more appropriate than would a description of fire fighting services to be provided by the local fire department. The local fire department puts out fires in State as well as local structures, and the local Emergency Medical Service transports injured State personnel as well as injured local residents.

When the local Emergency Medical Service (ambulance service) needs backup support, its first recourse is to seek assistance from other, nearby Emergency Medical Services under existing Mutual Aid agreements. Only when those nearby ambulance services are unable to adequately respond will a request for assistance be forwarded to the State. If the State, therefore, includes information concerning those nearby ambulance services in the State plan, it will only be enumerating resources which will already have been exhausted before any need for State assistance is identified.

What is contained in Appendix 3 to Annex L is a description of the process for requesting and obtaining backup ambulance support from other parts of the state. No specific listing of those resources is necessary in the State plan because the Division of Emergency Medical Services, in the Bureau of Emergency Management, has continuous access to a computerized listing of all ambulance services within the state, including their vehicle and equipment capabilities and their personnel numbers and training records. To incorporate any of that specific data in the State plan would be to attempt to predict the type and quantity of support required, and to introduce plan obsolescence because of the rapidity with which the data would change.

COMMENT: (By The Nuclear Regulatory Commission)

Procedures for medical transportation to medical support facilities could not be located in the plan.

RESPONSE:

Procedures for medical transportation do not belong in the State plan. If they belong anywhere, they belong in Standing Operating Procedures of the local Emergency Medical Service. As stated in the response to the Argonne National Laboratory comment above, the State plan addresses provision of backup support to local government; not specific details of local governmental functions.

COMMENT: (By Federal Emergency Management Plan)

Reference is made to appendices 3 and 11 of Annex L. Functional Statements for the appendices is insufficient to determine the capability for transporting contaminated individuals to medical facilities. Either the functional statements should be expanded to include this or appendices 3 and 11 made available for review. If this is local plan responsibility for addressing, O.K. Needs clarification.

RESPONSE:

Transportation of contaminated individuals to medical facilities is a local plan responsibility. See responses to Argonne and NRC comments above.

M. Recovery and Reentry Planning and Postaccident Operations

PLANNING STANDARD:

General plans for recovery and reentry are developed.

M.1. EVALUATION CRITERION:

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.

COMMENT: (By Health and Human Services - FDA)

This criteria not discussed as to general plans and procedures for reentry and to describe means by which decisions to relax protective measures are reached. There should be general plans that include what levels of exposure would be acceptable from ingestion and/or inhalation pathways. It should also include the potential conditions of buildup of contamination in the food pathways or the transfer of contamination, i.e., drainage from land into potable water supplies.

RESPONSE:

Reentry is by definition a concept rather than a checklist. Appendix 7, Annex L, paragraph VII.B.8., page 12, discusses area decontamination during the recovery and rehabilitation phase of an emergency, while Procedure 1 of Tab 1:FNF Response, Chapter 1:CPSES, paragraph 4.D, pages 1-20 and 1-21 provides the concept. Long range assessment and protective action recommendations for the ingestion pathway are listed in Tab 1:FNF Response, Chapter 1:CPSES, Procedure 1, paragraph 4.B. pages 1-10 through 1-19. Included within the text are protective and emergency action guides for thyroid and whole body exposures.

Attachment 4 of Procedure 1, pages 1-26, 1-27, 1-28, and 1-29 describe EPA preventive response levels for I-131, Cs-137, Sr-90, and Sr-89. Preventive PAG's limit thyroid dose commitment to 1.5 rem and whole body or bone marrow to 0.5 rem to an exposed individual in the population. Procedure 2 - Selection and Use of Protective Clothing; Procedure 3 - Contamination Survey Techniques, Area and Equipment; Procedure 4 - Tool and Equipment Decontamination; Procedure 5 - Personnel Monitoring and Decontamination; and Procedure 6 - Area Decontamination Methods, support the concept of reentry and offer guidance for use during recovery.

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.

N.1.a. EVALUATION CRITERION:

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.

COMMENT: (By the Nuclear Regulatory Commission)

Exercises are provided for and will be conducted "... in accordance with requirements identified by the Federal Emergency Management Agency." (Tab 1: FNF Response, Introduction, Attachment 4-4). Reference to the "NRC rules" mentioned in Element N.1.a. are not included in the State plan.

RESPONSE:

...nor do we intend to include them. NUREG-0654 / FEMA-REP-1, Rev. 1 contains guidance jointly issued by FEMA and NRC. As stated in the State plan, we will conduct exercises "in accordance with requirements identified by the Federal Emergency Management Agency." We will not, however, blindly commit ourselves to future requirements imposed by the NRC.

N.1.b. EVALUATION CRITERION:

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.

COMMENT: (By Argonne National Laboratory)

Sec. II.A., Attachment 4, Tab. 1, Introduction, Annex 7. (sic) But no mention is made of provisions for starting exercises between 6:00 p.m. and midnight and between midnight and 6:00 a.m.

RESPONSE:

Section II.A. states, in the last sentence of the first paragraph "Exercise scenarios will be designed to test major components of relevant plans, and will be scheduled to demonstrate 24-hour operating capabilities starting at any time of day or night in any type of weather." (emphasis added) Since we have already committed ourselves to conducting exercises "... in accordance with requirements identified by the Federal Emergency Management Agency", and since "any time of day or night" includes 6:00 p.m. to midnight as well as midnight to 6:00 a.m. we must conclude that the reviewer failed to read the cross referenced materials in Appendix 7, Tab 1, Introduction.

N.2.d. EVALUATION CRITERION:

Radiological Monitoring Drills

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.

COMMENT: (By the Nuclear Regulatory Commission)

The State plan does not provide for radiological monitoring drills. The plan states that Bureau personnel routinely perform radiological monitoring and therefore do not need an annual drill.

The value of such a drill is to provide monitoring teams the opportunity to practice in the environment surrounding the nuclear facility. For this reason, an annual drill is recommended.

RESPONSE:

The reviewer's comment is illogical. Since the Evaluation Criterion specifically states that the State drills need not be at each site, the value of those drills cannot be that they provide an opportunity to practice in the environment surrounding the nuclear facility. There must be some other reason for conducting them, and once you eliminate site familiarization, the only thing left is practice in monitoring and reporting; which are the very things that our teams receive in the normal course of their duties. Further, since the monitoring teams will participate in the annual exercise, the only remaining question seems to be one of whether doing something twice a year is significantly better than doing it once a year, which is the only difference between an annual exercise and an annual exercise plus an annual drill.

COMMENT: (By the Environmental Protection Agency)

Attachment 4 to Tab 1 Intro. (p. 20) asserts that drills over and above those conducted during annual exercises are not necessary, since the staff perform such activities routinely. This may be true at present, but the situation could change in the future. The plan would be a better one if it specified that additional drills would be carried out if exercise debriefing or critiques should indicate this need. Additional drills may also be appropriate as staff assignments are changed, new equipment is acquired, or new procedures are instituted.

RESPONSE:

What the reviewer suggests is exactly what the plan already contains. As identified in the cross reference to Evaluation Criterion N.5., which addresses plan revision as a result of identified exercise deficiencies, Appendix 7, XI.D. (Plan) REVIEW AND REVISION states (in part) "Revisions shall take into account changes identified by exercises and drills, as well as those necessitated by changes in personnel assignments or concepts of operation." Further, Attachment 4 to Tab 1, Introduction, which is a part of Appendix 7, states, on page 19, "Following each exercise, a critique will be conducted, observer comments will be evaluated, necessary changes to appropriate plan elements will be incorporated, and plan updates will be issued."

If exercises debriefing or critiques should indicate the need, if staff assignments are changed, or if new equipment is acquired or new procedures are instituted, the plan already contains adequate provisions for including additional drills or any other new requirement.

N.3. EVALUATION CRITERION:

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:

N.3.b. EVALUATION CRITERION:

The date(s), time period, place(s) and participating organizations;

COMMENT: (By Argonne National Laboratory)

The dates, times, places for exercises and drills are not mentioned in Annex 7 or elsewhere in the plans.

RESPONSE:

If the reviewer will read the evaluation criterion he will note that this information is to be included in the exercise scenario, not in the plan. Since we did not submit a scenario, it should come as no surprise that dates, times and places for exercises and drills are not mentioned. We have stated that we will conduct exercises and drills in accordance with requirements identified by FEMA. As information to be included in exercise scenarios in accordance with FEMA requirements, dates, times and places for exercises and drills will be included in those scenarios.

N.3.c. EVALUATION CRITERION:

The simulated events;

COMMENT: (By Argonne National Laboratory)

No time schedule of events is included in Annex 7 or elsewhere in the plans.

RESPONSE:

See response to Argonne National Laboratory's comment on N.3.b., above. Even if the reviewer does not understand the difference between a scenario and a plan, he should realize that publication of a schedule of simulated events in a document which is to be distributed to all players would hardly be conducive of an unrehearsed test of response capabilities.

N.3.e. EVALUATION CRITERION:

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

COMMENT: (By Argonne National Laboratory)

The narrative summaries that describe the conduct of exercises listed in Sec. II.A., Tab. 1, Appendix 7 adequately cover the exercises listed. However, no exercises or drills including such things as simulated casualties, off site fire department assistance, rescue of personnel, etc. are mentioned.

RESPONSE:

Except for et cetera, all of the items noted are local responsibilities which have no place in a State plan. Et cetera is adequately addressed in descriptions of response team assignments contained under Emergency Functions on pages 7 through 17 of Appendix 7, and under Training, Drills and Exercises on pages 17 through 19 of that same document. This was not noted in the cross reference because, as stated above, these are requirements of the exercise scenario, not of the emergency management plan.

N.3.f. EVALUATION CRITERION:

A description of the arrangements for and advance materials to be provided to official observers.

COMMENT: (By Argonne National Laboratory)

A description of the arrangements for and advance materials to be provided for official observers is not included in the sections covering Exercises and Drills, Sec. II.A., Tab. 1 Introduction; Appendix 7 or elsewhere in the plan.

RESPONSE:

A description of the arrangements for official observers is most definitely included in Section II.A. of Attachment 4 to Tab 1, Introduction, on page 19. "In addition to any official observers who may be provided by Federal agencies, the annual exercises will be observed by a team of knowledgeable individuals comprised in part of representatives from participating State Agencies. This team will be augmented as necessary by personnel from similar programs in other states under a cooperative agreement between the states of Texas, Arkansas, Louisiana and Mississippi."

Since participation of Federal observers is beyond the control of the State, we can only acknowledge that they may be present. We have, however, arranged for participation by State observers in numbers and expertise which will be adequate whether or not Federal observers are present.

Concerning advance materials to be provided for official observers, we again point out that we have made a commitment to conduct exercises in accordance with FEMA guidance, which includes provision of such advance materials to official observers as FEMA guidance may require.

N.4. EVALUATION CRITERION:

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.

COMMENT: (By U. S. Department of Agriculture)

The plans do include instructions for the required exercises, drills and critique by qualified observers from the State, Federal and local governments.

A USDA designated representative will attend the exercises.

We suggest the alert procedures for USDA be included as follows: The Chairperson of the USDA State Emergency Board in College Station, Texas, (713 - 846-8821, Extension 207) should be contacted.

RESPONSE:

No. Although it is not clear from the reviewer's comment whether he refers to USDA participation as an exercise player or provision of a USDA observer, the answer is the same in either case. All requests for Federal assistance will be directed through the (State) Division of Emergency Management to the Federal Emergency Management Agency. It is the responsibility of FEMA to arrange for Federal observers, and to route all requests for off-site Federal assistance, both during exercises and during actual emergency response operations.

O. Radiological Emergency Response Training

PLANNING STANDARD:

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

O.1. EVALUATION CRITERION:

Each organization shall assure the training of appropriate individuals.

COMMENT: (By Department of Health & Human Services - FDA)

The plans for training include State Personnel only.

RESPONSE:

Training of local emergency response personnel is the responsibility of local government and must be addressed in local plans. See response by local planners for details of local training.

COMMENT: (By Federal Emergency Management Agency)

Training of state response personnel addressed in annex L. Appendix 7, VIII addresses training of response team members. Tab 1, attachment 4 further addresses training. (Not referenced)

RESPONSE:

Since Tab 1, Introduction: Attachment 4 is the only part of Appendix 7 which is cross referenced, we must question the acumen of the FEMA reviewer. (As a point of clarification, that reference is in response to evaluation criterion O.l.b., since O.l.a. applies to the Licensee only.)

0.4. EVALUATION CRITERION:

Each organization shall establish a training program for instructing and qualifying personnel who will implement radiological emergency response plans. The specialized initial training and periodic retraining programs (including the scope, nature and frequency) shall be provided in the following categories:

0.4.d. EVALUATION CRITERION:

Police, security and fire fighting personnel;

COMMENT: (By Argonne National Laboratory)

Cross reference for the state plan, Part I, Attachment 5 makes the Texas Engineering Extension Service responsible for training of fire fighting personnel, but not for training of police and security personnel; reference is also made to Annexes R, AA and FF which are not available as part of the plan. Relevant information from these annexes should be included in the plan or the annexes themselves should be included as attachments to Appendix 7 to make the radiological emergency response plan more responsive to the needs of emergency response personnel.

RESPONSE:

Annexes R, AA and FF are part of the plan, just as Annex L (which was submitted) is part of the plan. The reviewer is once again reminded that all agency annexes to the State Emergency Management Plan are part of the plan, and that copies of any or all of those annexes were offered for review upon request.

0.4.f. EVALUATION CRITERION:

First aid and rescue personnel;

COMMENT: (By Argonne National Laboratory)

Same comment for 0.4.d. applies.

RESPONSE:

Same response for 0.4.d. applies.

0.4.g. EVALUATION CRITERION:

Local support services personnel including Civil Defense/Emergency Service personnel;

COMMENT: (By Argonne National Laboratory)

Provisions for training of local support personnel are referenced by the cross reference to the local plans. However, this item is not found in the local plans.

RESPONSE:

That is a local problem and the comment should be addressed to the local planners rather than to State planners as was done here. See response by local planners for information on this training.

0.4.h. EVALUATION CRITERION:

Medical support personnel;

COMMENT: (By Argonne National Laboratory)

The cross reference for training of medical support personnel in Sec. VIII, Annex L appears not to be responsive. Reference is made to "appropriate annexes to this plan." The same comment made in 0.4.d. above applies.

RESPONSE:

No. Reference is not made to appropriate annexes to this plan. Reference is made to appropriate appendices to this annex (Annex L). Since the Texas Department of Health has no responsibility for training local medical support personnel, the reference is entirely correct.* Each Bureau within the Department of Health, and the Public Health Regions are responsible for training those medical support personnel who are within the respective bureau or region. That training is described in the bureau's or region's appendix to Annex L, just as the cross reference indicates. The same response made in 0.4.d. above applies here also.

0.4.j. EVALUATION CRITERION:

Personnel responsible for transmission of emergency information and instructions.

COMMENT: (By Argonne National Laboratory)

Annex R is referenced in the cross reference for training of personnel responsible for transmission of emergency information. The same comment for 0.4.d. applies.

RESPONSE:

The same response for 0.4.d. applies.

0.5. EVALUATION CRITERION:

Each organization shall provide for the initial and annual retraining of personnel with emergency response responsibilities.

COMMENT: (By Argonne National Laboratory)

The cross reference refers to documents that are not available as part of the basic radiological emergency response plan and is not responsive to the criteria. The same comment as for 0.4.d. applies.

RESPONSE:

For the Nth and final time, there is no such thing as a "basic radiological emergency response plan" in Texas. There is a basic Emergency Management Plan which addresses radiological emergencies along with all other types of natural or man-caused disasters. If

the reviewer had read the basic plan and the letter of transmittal, he could have avoided making an entire series of inappropriate comments. The same response as for O.4.d. applies.

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.

P.1. EVALUATION CRITERION:

Each organization shall provide for the training of individuals responsible for the planning effort.

COMMENT: (By Argonne National Laboratory)

The cross reference for training of individuals responsible for planning is given as Tab. 1, Introduction Section I.B.1. The reference should be Attachment 4-2, Sec. I.B.1. in Introduction Section of Tab. 1.

RESPONSE:

Neither is correct. The reference should be "Tab 1, Introduction: Attachment 4, Section I.B.1. (page 16)"

P.7. EVALUATION CRITERION:

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.

COMMENT: (By Argonne National Laboratory)

Section XIII and the Procedures section of Annex 7 contain generalized statements about the status of the plan. However, no listing by title of detailed procedures for step by step implementation of the plan is included. The sections of the plan to be implemented by each procedure are not identified.

RESPONSE:

The reviewer is referred to the Table of Contents on page iii of Tab 1, Chapter 1. This is a listing by title of detailed procedures. The procedure titles are self-explanatory.

P.10. EVALUATION CRITERION:

Each organization shall provide for updating telephone numbers in emergency procedures at least quarterly.

COMMENT: (By Federal Emergency Management Agency)

Telephone numbers of response personnel will be updated annually. Should be quarterly.

RESPONSE:

As cross referenced, Appendix 7, Attachment 5, (page 28-5) states,

"This list is maintained by the Staff Services Officer. It is to be reviewed and updated at least once each calendar quarter, or more frequently as changes occur. Changes to this list may be circulated as replacement pages or as pen-and-ink changes at the discretion of the Staff Services Officer."

As cross referenced, Annex L, Section VI.C. (page 5) reads:

"To facilitate notification of bureaus and public health regions, the Director, Disaster Response Program shall maintain a list of current home telephone numbers or other after-hours contact procedures for each Public Health Region and for each Bureau having an emergency management function under this plan."

and Section VII.A.4. (page 7) reads:

". . . This list should consist of at least three, and no more than five names along with office and residence telephone numbers. Changes to this list should be submitted to the Director, Disaster Response Program as they occur."

As cross referenced, the Texas State Emergency Management Plan, Part Two; IV.A. (page 7) states:

"The designation list shall indicate the priority order of call and the respective office and home telephone number of each person."

In summary, Appendix 7 and Annex L each adequately ensure that the lists will be updated at least quarterly if changes have occurred. The State plan leaves even less room for question. If at any time the names or telephone numbers on the state call list are incorrect, the agencies have not met the requirement imposed under the plan. An out-of-date list is no list at all; therefore agency heads are given no option but to make changes as they occur. The details of actual list updating are included in Annex AA as noted in the cross reference.