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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)
)
KANSAS GAS AND ELECTRIC COMPANY, et al.) Docket No. STN-50-482
)
(Wolf Creek Generating Station,)
Unit No. 1))

INTERVENORS' PROPOSED FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND BRIEF IN THE FORM
OF A PROPOSED INITIAL DECISION

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OPINION

I. INTRODUCTION

A. BACKGROUND AND SCOPE OF DECISION

On May 17, 1977, the Nuclear Regulatory Commission (NRC) issued a construction permit to the Wolf Creek Generating Station, Unit No. 1 (Wolf Creek). Wolf creek is located in Coffey County, Kansas, approximately 75 miles south of Topeka, 75 miles southwest of Kansas City, and 100 miles east-northeast of Wichita. On August 5, 1980, Kansas Gas and Electric Company (KGE), Kansas City Power & Light Company, and Kansas Electric Power Cooperative, Inc. (collectively "Applicants") file an operating license application for Wolf Creek.

Wanda Christy and Mary Ellen Salava (Intervenors) sought a hearing and were admitted as intervenors based on a contention challenging the workability of the emergency

evacuation plan. Kansans for Sensible Energy (KASE) was admitted as intervenors together with their contention on Applicants' financial qualifications. (KASE's appeal from its dismissal has been deferred based upon the litigation of NRC's financial qualifications rule and the Commission's March 5, 1984 Statement of Policy).

Following the completion of initial and supplemental discovery, the parties negotiated, and the Atomic Safety and Licensing Board (Licensing Board) ultimately adopted over three hundred contentions on the workability of emergency evacuation. Some of these were subsequently withdrawn.

Evidentiary hearings took place on January 17-21, 23-26 and February 14-16, 1984, in Burlington and Emporia, Kansas.

B. CONTENT OF OPINION AND FINDINGS

The Licensing Board's Initial Decision begins with the Licensing Board's Opinion, which is largely comprised of a discussion of the litigated contentions and their resolution. The second part of the Initial Decision comprises the Licensing Board's Findings of Fact, Conclusions of Law, and Order directing the Director of Nuclear Reactor Regulation to deny the application to issue a full power operating license for Wolf Creek.

II. ISSUES IN CONTROVERSY

A. BACKGROUND

Emergency evacuation of the area around Wolf Creek site is governed by two distinct but coordinated emergency plans. The Coffey County Contingency Plan for Incidents Involving

Commercial Nuclear Power (County Plan), Applicants' Ex. 1, and the State of Kansas plan, Annex A, Nuclear Facilities Incidents Response Plan, to Assistance R, Nuclear Emergencies, of the State Disaster Plan (State Plan), Applicants Ex. 2. The County Plan describes the responsibilities of Coffey County organization in response to an emergency at Wolf Creek. Implementing procedures provide further detail on County emergency response. The State Plan describes the responsibilities of the State agencies in response to accidents at nuclear facilities, including Wolf Creek.

The State and County Plans were developed in response to the Commission's emergency planning regulations. The emergency planning regulations are intended to provide a framework for public protection in the event of a serious radiological emergency. The Commission's requirements are set forth in 10 C.F.R. 50.47 and in Appendix E to 10 C.F.R. Part 50. NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (Rev. 1, Nov. 1980) (officially noticed, Tr. 457), jointly prepared by Federal Emergency Management Agency (FEMA) and the NRC staffs, provides guidance on how the requirements of the emergency planning regulations can be fulfilled.

An important concept in the Commission's emergency planning regulations is the "plume exposure pathway Emergency Planning Zone" or "EPZ". The EPZ is defined as

an area "about 10 miles" in radius around the reactor. Its exact size and configuration are to be determined by local conditions, such as demography and access routes. 10 C.F.R. 50.47(c) (2).

Emergency plans must meet 16 separate standards articulated in the emergency planning regulations. In addition to the requirements for provisions for emergency notification and implementation or protective actions, the standards require provision for clear definition of responsibilities, adequate staffing, establishment of a standard emergency classification and action level scheme, prompt communications among emergency response organizations, public information programs, emergency facilities and equipment, offsite radiation monitoring and assessment capability, training of staff, and periodic drills of emergency response capabilities. 10 C.F.R. 50.47(b) (1)-(16). Each of the 16 standards set forth in the Commission's regulations is addressed by criteria in NUREG-0654.

No operating license is issued unless the Staff can make a favorable finding that "there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency." 10 C.F.R. 50.47(a) (1).

The Staff's overall finding on the state of emergency preparedness within the EPZ includes a review of FEMA findings and determinations as to whether State and local

emergency plans are adequate and capable of being implemented. 10 C.F.R. 50.47(a)(2).

FEMA's regulations, 44 C.F.R. Part 350, include 16 planning objectives which parallel the 16 standards incorporated in the NRC's regulations at 10 C.F.R. 50.47(b). See 44 C.F.R. 350.5(a)(1)-(16). Similarly, like the NRC's regulations, FEMA's regulations explicitly reference the specific criteria of NUREG-0654. See 44 C.F.R. 350.5(a). FEMA is to determine whether offsite plans and preparedness provide "reasonable assurance that appropriate protective measures can be taken offsite in the event of a radiological emergency".

The licensing board must make finding on the specific contentions raised by the Intervenor, within the context of the standards and criteria discussed above, and the board must determine if there is "reasonable assurance that appropriate protective measures can and will be taken in the event of a radiological emergency". If the board can not make that finding, the Applicants' application for the operating license must be denied. See 10.C.F.R. 50.47(a)(1).

B. INTERVENORS' CONTENTIONS

Contention 1.e.

The County Plan does not make adequate provision for how the sheriff will notify the U.S. Army Corps of engineers, U.S. Fish and Wildlife Service, and the Kansas Fish and Game Commission when the warning function is activated. The evacuation time will, therefore, be longer than estimated.

1. There are not adequate provisions because tone alerts have not been installed at the John Redmond Reservoir

headquarters of The U.S. Army Corps of Engineers (ACE), the U.S. Fish and Wildlife Service (USFW), and the Kansas Fish and Game Commission (KFG). Additionally, the offices of the agencies are not open 24 hours per day except for the ACE's office which is open 24 hours per day during the summer months. The primary means of notification to the agencies is by phone, but there is no back up because the tone alerts are not installed. The plan does not provide what will be done if there is no one at the offices.

Intervenors' Proposed Findings of Fact, paragraph 2 (IPF 2).

2. Because of these deficiencies the plan does not meet the requirements of NUREG-0654 and 10 C.F.R. 50.47(b). There must be provisions for prompt communications among response organizations to emergency personnel. 10 C.F.R. 50.47(b)(6). NUREG-0654, F.1., requires that there be back up means of communications and that the response organizations have the ability to initiate a notification on a 24 hour per day basis.

3. The tone alerts should be installed and tested before the plan is approved and before the license is granted. The plan should specify how the notification will be made when the offices of the agencies at John Redmond Reservoir are not staffed.

Contention 1.i.

The County Plan does not specify who the Fire Leader is to notify if a fire chief is not available.

4. There are no assurances that there is an adequate alternate to the fire chief. The alternate needs to be

specified in the plan so that the alternate can be notified if the fire chief is not available. The plan specifies that the fire chief is to be given a notification. IPF 3.

5. Because of this deficiency the plan does not meet the requirements of NUREG-0654, E.2., which requires that the plan establish procedures for alerting and notifying emergency response personnel.

6. To correct this deficiency, the plan should specify an alternate to the fire chief that the fire leader is to contact if the chief is not available.

Contention 2.b.

Ten or twelve additional people will be required to handle telephone calls at the Coffey County Emergency Operations Center. None of these people are available.

7. No one at the County Emergency Operations Center (EOC) is assigned this responsibility. There will be sheriff's dispatchers at the EOC, but they are not assigned any responsibility for this duty. The key people in the response organization will be at the EOC, and they will be handling these calls. There is no estimate of the number of calls that will come in. IPF 4.

8. The plan is deficient because it does not meet the standards of NUREG-0654, A.1.e., which requires that the county provide adequate staff for a 24 hour per day emergency response. Also, 10 C.F.R. 50.47(b)(1) requires the county to have adequate staff to respond to an emergency. The key people at the EOC will have primary responsibilities, and they will not be able to adequately do their jobs if they are answering the phones. FEMA has

testified that it would be desirable to have someone assigned to take the calls. Tr. 1771-1772 (Leonard).

9. The operating license should not be granted until the plan is revised to provide that someone in the EOC, other than the key personnel, will be assigned to handle the phone calls that come in. Since sheriff's dispatchers are in the EOC, they could be assigned this duty.

Contention 2.c.

The telephone system will not be adequate. There will not be enough lines in the event of an emergency.

10. There is only one telephone line at the Engineer's office. Calls will come to that line when people want to obtain transportation for evacuation. Two lines will be needed and used. One line is only enough for normal activities. IPF 5.

11. Under NUREG-0654, J.10.g., the county is to provide a means of relocating people in the EPZ. This includes providing transportation for them if they do not have it. This requirement is not met until there are an adequate number of phone lines installed at the engineer's office. Some people will need to call in for transportation because it is not available to them. Since one line will not be enough, two should be installed so that people can be assured of getting their call through and having transportation arranged for.

12. The operating license should not be granted until the second line is installed at the engineer's office.

Contention 3.a.

The sheriff needs radio equipment that will permit him to talk to the Wolf Creek plant and all of Coffey County.

13. The present radio communications equipment of the sheriff does not permit him to communicate by that equipment with the plant. New equipment is on order that will be installed and will permit him to communicate with the plant by the use of that equipment. This is a primary and backup means of communicating with the plant. IPF 6.

14. The county is to have primary and backup communications with the plant as provided by NUREG-0654, F.1.d. Since this capability does not exist the plan is deficient.

15. The operating license should not be granted until the communications equipment that permits the sheriff to talk by radio to the plant has been installed and tested.

Contention 6.g.

Due to insufficient staffing, Coffey County cannot adequately direct the evacuation. Although 2 personnel are required to perform this function, only the sheriff is presently available.

16. The sheriff is responsible for directing the evacuation. The undersheriff who is supposed to assist him may have other duties assigned to him by the sheriff. These would be duties as a regular officer outside the EOC. There will be no relief for the sheriff other than the undersheriff during an accident. IPF 7.

17. The plan is deficient because it does not meet the requirements of NUREG-0654, A.1., and 10 C.F.R. 50.47(b)(1) that require the county to have adequate staff to carry out the plan. There is not adequate staff because the sheriff

will not have assured relief since the undersheriff may be assigned to other duties in the field.

18. The operating license should not be granted until the plan is revised to provide that the undersheriff will assist the sheriff and will not be assigned duties that would prevent him from doing so and that would prevent him from acting as relief for the sheriff. The plan should provide that the undersheriff is the alternate to the sheriff.

Contention 8.c.

The County Plan does not provide an estimated evacuation time for individuals who do not have their own private automobiles for transportation. There is no estimate of evacuation time for them.

19. The footnote at page K-19 of the county plan (Applicants' Ex. 1) is incorrect. It needs to be corrected to show that the estimate is for all classes of the special population that need transportation. IPF 8.

20. The testimony of the Applicants' witness, Stern, indicates that the footnote needs to be changed as indicated in paragraph 19. NUREG-0654, p. 4-9, requires that there be an estimate of the time required to evacuate the population depending on public transportation.

21. The operating license should not be issued until the footnote is changed as indicated in paragraph 19.

Contention 9.c.

The County Plan is deficient because the evacuation routes send the evacuees downwind and create greater risk to them in many instances. The plan needs to give adequate consideration to wind directions and possible changes in wind direction during an evacuation.

22. It will be necessary for the EBS announcements to deal with the wind direction if that is significant at the time of the accident. The information in the preprepared EBS announcements may change due to changes in evacuation routes that are caused by the direction of the wind. Changes in the EBS announcements will be made at the time of the emergency. IPF 9.

23. There is no evidence that the plan considers the effect of wind direction at the time of the evacuation on the evacuation routes. It is acknowledged in the testimony of Michael Stern and the Testimony of the FEMA witnesses that the wind direction will have an effect on the evacuation routes. NUREG-0654, J.10.k., requires that the plan deal with potential impediments to the use of the evacuation routes. The direction of the wind would be such an impediment, and because the plan does not consider how to deal with that impediment, the plan is deficient.

24. The operating license should not be granted until the plan is changed to adequately consider how evacuation routes will be selected considering the direction of the wind.

Contention 9.e.

The County plan does not provide for alternate evacuation routes that will be necessary if there is heavy snow, rain, flooding, or fog.

25. There is nothing in the plan that that deals with these alternate routes according to the testimony of the Emergency Preparedness Coordinator for Coffey County. IPF 10. As indicated in paragraph 23, there is a requirement

that this be done, and since the plan does not consider this it is deficient.

26. The operating license should not be granted until the plan is changed to adequately consider how the plan will deal with the situation where an alternate evacuation route needs to be selected due to the factors specified in the contention.

Contention 11.a.

The County Plan is deficient because it is not possible under the plan to notify 100% of the population within five miles of the site within a fifteen minute period, and it is not possible to assure 100% coverage within 45 minutes for those persons who do not receive the initial notification and are within the ten mile EPZ. The evacuation time will therefore be longer than estimated.

27. Certain transients at John Redmond Reservoir will not be able to be warned within 45 minutes after the decision to warn is made. NUREG-0654 requires at page 3-3 that they be warned in 45 minutes if they are not in siren range. Some transients at John Redmond Reservoir will be warned by siren. There are not sufficient sirens installed at the present time to warn them. The applicants have indicated that two more sirens will be installed, but until the plan is amended to reflect this change, the plan is deficient. IPF 11.

28. Even with two more sirens there will be a portion of the area of the reservoir under the control of the USFW that will not be warned by the sirens. The plan does not detail how the warning will be made for that area as required by FEMA, and this should be in the plan. Additionally the plan does not meet the standards of FEMA's

Ex. 1, FEMA 43 for warning people in that area. FEMA is not certain if the warning can be done in 45 minutes. This uncertainty is because the delay time from the decision to give the warning to the time the agency receives the notification has not been determined; and also because the routes that will be used have not been specified so that an estimate can be made of how long it will take to cover the routes. The tone alert at the USFW office has not been installed, so there is no secondary means of notification. IPF 12.

29. People who are using boats in the middle of John Redmond Reservoir and have the boat motor running will not hear the siren warning. Additionally, the Emergency Preparedness Coordinator for Coffey County has testified that there will be people on the water who will not hear the warnings, and the center of the reservoir can be used by people. There is no provision in the plan for warning these people. IPF 13.

30. Since there is no certainty that the people at John Redmond Reservoir who are using the USFW area that is not covered by the proposed sirens can be given a warning in the 45 minutes prescribed by NUREG-0654, and since certain boaters on the reservoir will not be able to hear a siren when a boat motor is running, the plan is deficient.

31. The operating license should not be issued until the plan is revised to show how boaters on John Redmond Reservoir will be warned and until the plan is revised to meet the standards of FEMA 43 for warning the transients in

the USFW area not covered by the proposed sirens. Additionally, the license should not be issued until FEMA has verified that the two sirens to be added will meet its criteria of providing a siren warning and until it verifies that the warning can be given in 45 minutes to the USFW area that is not covered by the sirens.

32. Because the sirens and tone alerts will not cover the entire EPZ, some individuals will not hear the warning. The plan does not specify how these people will be warned. Farmers in the fields would fall into that category, and there would be others such as construction workers. FEMA has recognized that in some areas warning routes are developed to warn farmers in the field. The applicants recognize that this is an area that needs to be dealt with because their witnesses, Mileti and Wilcox, testified that the EBS announcements should contain a statement that farm families should warn farmers in the fields. IPF 14.

33. NUREG-0654, page 3-3, requires that there be coverage within 45 minutes of 100% of the population that does not receive the initial notification. The farmers and the others described in paragraph 32 are in the class that should be warned in 45 minutes. Since the plan does not make provision for warning farmers and others in that class, the plan is deficient. It is not enough to ask farm families through EBS announcements to warn farmers in the field. IPF 14.

34. The license should not be issued until the plan is revised to provide a way to warn individuals in the EPZ who because of their location are not able to hear a siren warning or a tone alert warning.

35. The plans for giving special warnings to those who can be identified in advance as needing special notification are not adequate. People in this category would include those who are deaf and others who might not be able to hear the siren or tone alert for other reasons than those described in paragraph 32. The plan only indicates in a very brief manner how this will be done. At the present time the county is not able to identify where the individuals are located who will need the special warning. There is no evidence of how long it will take to warn these people. The county will not initiate a program to contact people about the person's need for a special warning except that it will mention this in the annual mailing that goes to people in the EPZ and will contact doctors and some others for names that might need to be on the list. None of the details of this are in the plan or the implementing procedures. The plan does not include the agreements with the various fire departments that commit them to provide personnel to make the special warnings in LeRoy and Burlington. IPF 15, 16.

36. The people needing the special warning referred to in paragraph 35 must be warned in 45 minutes as required by NUREG-0654, p.3-3. This requirement is not met in the plan

because the people charged with doing so do not have adequate directions in the plan about how to accomplish that goal. Additionally, there is no evidence that the warning can be given in 45 minutes. Thirdly, the method for identifying the people is not adequate because there is no direct survey made of each household by the county. Rather, it relies on people to respond to the annual mailing.

37. The plan is to include the agreements with the Burlington, Gridley, Lebo, LeRoy, and Waverly fire departments about providing services to notify the people who need special notification. This is a requirement of NUREG-0654, A.3.

38. The operating license should not be issued until the following changes in the plan are made:

a. The plan is revised to include details of how the list of people needing special warning will be kept up to date. Such revision should include a provision that Coffey County will annually contact each resident in the EPZ by phone or personal interview to determine if the person needs a special warning. Such revision must include a method whereby the location of the persons to be warned can be determined.

b. FEMA verifies that the special warning specified in paragraph 35 can be made in 45 minutes.

c. The agreements with the fire departments described in paragraph 37 are made part of the plan.

Contention 11.e.

There is no provision about how to make the warning if one or more sirens fail to operate. The evacuation time will therefore be longer than estimated.

39. There is no evidence that there is any provision in the plan about what will be done if a siren fails to operate. The Emergency Preparedness Coordinator has testified that if a siren fails, the county would warn by running the area with sheriff's patrol cars. However, there is no staff assigned to make such a warning. IPF 17.

40. If a siren fails, it would not be possible to warn the people in the area covered by the siren in 45 minutes because there are no plans for doing so and because no one is assigned to do that. Therefore, the plan would not be able to meet the requirements of NUREG-0654, E.6., and p. 3-3, that require the warning to be made in 45 minutes.

41. The operating license should not be issued until the plan is revised to provide how a warning will be made if a siren fails to operate. Such revision shall indicate how many people will be assigned to make the warning and who they will be. The revision should also include an estimate of the time that such a warning will take. FEMA should verify that the warning can be made in the time estimated by the county before the license is issued.

Contention 11.j.

There is no provision for testing or maintenance of the tone alerts. The evacuation time will therefore be longer than estimated.

42. There is no evidence that the plan contains any provisions for the testing and maintenance of the tone alerts. In its testimony for contention 11.j., FEMA has

testified that the plan for tone alert administration does not meet the standards of FEMA 43. IPF 18.

43. If the tone alert warning system is not tested and maintained properly the system will be more likely to have failures when it is activated at the time of an accident. If that occurs, the notification required can not be given in the 15 minutes required by NUREG-0654, p. 3-3. Therefore, the plan is deficient.

44. The operating license should not be issued until the provisions for testing and maintaining the tone alert system meet the standards of FEMA 43. The plan should be revised so that it meets the standards of FEMA 43 for tone alerts.

Contention 12.e.

There is no detail about how the educational material will be provided to transients.

45. The location for and the number of signs at John Redmond Reservoir to be used for the purpose of providing emergency information to transients at the reservoir have not been determined. The information that will be on the signs has not been developed. The signs are the primary means of providing public education material to the transients at the reservoir. IPF 19.

46. Under 10 C.F.R. 50.47(b)(7) the county is to provide procedures for the dissemination of information to the public, including transients. Also under NUREG-0654, G.2., the emergency information is to be provided to the transients, and this can be done by signs. Since the signs

have not been located and the information on them has not been developed, the plan does not meet the standards set forth in this paragraph.

47. The operating license should not be issued until the location of the signs to provide information to transients at John Redmond Reservoir is specified in the plan and until the information that will be on the signs is developed and approved by FEMA.

Contention 12.s.

The County plan is deficient because in Section 3.3.1 the Public Information Officer will advise the parents where children have been evacuated to. This information should have been supplied to the parents at an earlier time. The plan does not make provision for providing such information.

48. The information about where the children from schools that are evacuated to host counties will be taken in the host county should be in the plan and the public information material. It is included in the EBS announcements, but it will not be in the brochure and other educational information provided before the emergency. The Public Information Officer for the county has testified that it will be in the brochure. IPF 20.

49. If the public is to have adequate information about how they are to respond in the event of an emergency, it is essential that parents know where the children will be taken when they are evacuated. This is also information that the children should have. The entire family should have it in advance. FEMA has testified that the information should be in the brochure and other public education information disseminated in advance. NUREG-0654, G.1.,

requires that the plan provide for the dissemination of information that will inform the public in advance how they are to respond. Parents will be most likely to respond properly in regard to picking up their children at the host county centers if the information about where they will be taken is in the brochure and other educational information provided in advance.

50. The operating license should not be issued until the plan has been revised to provide that the public education information distributed in advance will include a statement about where the children who are evacuated will be taken.

Contention 13.b.

The County Plan does not provide for transportation for the evacuation of pregnant women and small children if they are evacuated before others. If buses or other means of transportation are used for them, then that transportation might not be available to others when there would be a full evacuation.

51. The plan does not provide for transportation for pregnant women and young children if they are to be evacuated before others. Instead, they will be evacuated with the others who need special transportation. This will occur after the school buses take the children home or evacuate them to host counties. Precautionary evacuations are desirable for this class of the population. Special transportation should be provided for them so they can be evacuated ahead of others. IPF 21.

52. Under NUREG-0654, J.10.g., the plan is to provide for relocating the population in the EPZ. This would

include transportation for people without it at the time they need to be evacuated. Pregnant women and young children are highly susceptible to injury from radiation. Therefore they may need to be evacuated ahead of others. The Emergency Preparedness Coordinator for Coffey County testified that there will be no special early transportation for this class of persons. FEMA testified that special transportation should be provided for them, and the EBS announcement tells the pregnant women and pre-school age children to evacuate. All of this indicates that they may need to be evacuated at a time other than when others are being evacuated. Yet, there is no transportation provided for them if they do not have their own. Therefore, the plan is deficient because it does not provide a means to relocate this class of the population at the time that it is necessary to do so.

53. The operating license should not be issued until the plan has been revised to provide that transportation needed for pregnant women and young children will be available to evacuate them at a time earlier than others evacuate. Additionally, the County should demonstrate that this transportation will be available.

Contention 14.a.

The teachers, school administrators, and children have not been trained about how to handle the evacuation, and there are no plans in the County Plan to specify how they will be instructed to deal with an emergency evacuation.

54. The plan does not provide for training children and teachers about how to respond during an emergency.

Teachers need to know they have a role, and what their role is. Teachers in the Burlington schools will use their cars to assist in the evacuation, and will assist in evacuating the children on the buses. School superintendents and principals will receive training. IPF 22.

55. 10 C.F.R. 50.47(b)(15) requires that the plan provide training for those called on to assist in an emergency. NUREG-0654, O.1., requires that the county assure the training of appropriate individuals. Certainly, the teachers will assist in the emergency as set forth in paragraph 54 - particularly, the teachers in the Burlington school district who will provide transportation in their own cars. Such duties fall within the scope of the requirements specified in the first two sentences of this paragraph. FEMA supports this in that it testified that such training is reasonable. Additionally, most administrators at the schools will have duties similar to those of the teachers, and they will be trained. If the training is needed for the administrators, it is needed for the teachers.

56. The operating license should not be issued until the plan has been revised to provide that teachers who will assist in the evacuation of school children will receive the training that school superintendents and administrators receive.

Contention 14.b.

There are not enough school buses available to evacuate school children.

57. The Burlington schools have 750 students. The maximum capacity of the Burlington buses is 659. Teachers' cars will be used to evacuate the students that are in excess of the buses' capacity. Thirty teachers' cars will be required to evacuate the students. It is not certain if the 30 cars are available. The arrangements for use of the cars is not set forth in written agreements with the school district or the teachers. The plan itself does not even specify that the teachers' cars will be used. IPF 23.

58. 10 C.F.R. 50.47(b)(8) requires that the County have adequate equipment to carry out an emergency response. That requirement is not met because there is not enough transportation adequately arranged for to evacuate the students in the Burlington schools. First, the plan does not specify that that the teachers' cars will be used. It just indicates that the school buses will be used to evacuate the students, and the capacity of the buses is not large enough to accommodate all the students. Additionally, the proposal to use the teachers' cars is not reflected in any written agreement with the school district or the teachers. FEMA testified that there should be an advance understanding with the teachers. That understanding has not been obtained. If the teachers' cars are to be used that arrangement should be set forth in a written agreement with the teachers, school district, and the county as required by NUREG-0654, A.3.

59. The operating license should not be issued until the County and the Burlington school district arrange for enough school buses to evacuate all of the Burlington students at the same time and until that change is set forth is the county plan. Alternatively, the license should not be issued until the plan is revised to show that teachers' cars will be used to evacuate some of the children in the Burlington schools. If that alternative is selected, then the board should require that a written agreement between the county, the school district, and the teachers providing the cars be entered into, approved by FEMA, and made part of the plan.

Contention 15.a. The County Plan does not detail what type of health services will be provided for persons who are in institutions or under care on an outpatient basis prior to the accident. It does not specify which hospital they will be taken to. The plan does not consider the number of patients to be cared for.

60. There are no signed agreements with hospitals about accepting patients that are evacuated from the Coffey County Hospital and the Golden Age Lodge nursing home. IPF 24.

61. NUREG-0654, A.3., requires that there be written agreements with the hospitals that will be accepting the patients evacuated from the hospital and the nursing home. Those agreements will provide the detail about the type of health services to be provided, the charges for the services, and will show which hospitals the patients will be evacuated to.

62. The operating license should not be issued until the agreements described in paragraph 61 are signed, made part of the plan, and approved by FEMA.

Contention 15.c.

Coffey County does not have sufficient transportation (ambulances, buses, etc.) to evacuate people from nursing homes and the Coffey County Hospital.

63. Ambulances and funeral directors' vehicles will be used to evacuate the non-ambulatory residents of the Burlington Hospital and the Burlington nursing home. There are no signed agreements between Coffey County and the ambulance services that will provide the transportation. There are no signed agreements between Coffey County and the funeral directors that will provide the transportation. There should be such agreements. IPF 25.

64. NUREG-0654, H., requires the county to provide adequate equipment to support the response. There is no assurance that the ambulances and funeral directors' vehicles described in paragraph 63 will be available to assist with the evacuation unless that is detailed in a signed agreement. Additionally, the agreements are to be included in the plan as required by NUREG-0654, A.3.

65. The operating license should not be issued until signed agreements between Coffey County and the ambulance services and the funeral directors are included in the plan. Additionally, FEMA should verify that the vehicles contracted for are adequate to provide the transportation described in paragraph 63.

Contentions 15.n. and 15.o.

15.n. The county health nurse has not compiled a list of county residents who are shut-ins or who may need special evacuation assistance.

15.o. The County Plan does not make adequate provision for preparing a list of county residents who are shut in or who may need special evacuation assistance, and does not make adequate provision for updating the list as changes occur.

66. The list of people who are shut-ins and will need special transportation assistance has not been fully prepared. The details for preparing the plan and keeping it up to date are not in the plan. FEMA testified that the details of maintaining the list should be in the plan operating procedures, that the hearing impaired should be identified on the list, and that the Emergency Preparedness Coordinator should certify annually that the list is correct. IPF 26.

67. NUREG-0654, J.10.d., requires the county to protect those persons whose mobility is impaired. This requirement is not met if the list described in paragraph 66 is not adequately prepared and the plan does not provide the details of how it will be prepared and kept up to date.

68. The operating license should not be issued until the plan is revised to show how the list will be prepared and kept up to date. The list should be prepared before the plant begins operating. The hearing impaired should be specially identified on the list and the plan should provide how that will be done. FEMA should verify that the list is up to date, and the Emergency Preparedness Coordinator for the County should certify annually that the list is correct.

Contention 16.a.

The County Plan does not detail how many individuals will need transportation assistance that the County engineer is to provide for an evacuation. There is inadequate detail about how the Engineer will know who to evacuate.

69. No adequate estimate of the number of people that will need special transportation at the time of an emergency has been prepared. The plan does not provide how this will be done, and this needs to be in the plan. There will be a number that people can call for transportation if they need it, however, the plan and procedures do not specify that number, and only one of the two lines that are needed to permit these calls to go through is installed at the engineer's office. There will be a list of people that need transportation, but the provisions for that are not in the plan. IPF 27.

70. NUREG-0654, J.10.g., requires the county to provide a means to relocate the population. The population in the EPZ that does not have transportation cannot be relocated because they cannot be identified and they can not contact the County to indicate that they need transportation because there are not enough phone lines to the engineer's office. The county must have an adequate means of identifying those who will need special transportation. Only then can it provide enough transportation to evacuate people without transportation, and only then can it know where to pick them up if that is necessary.

71. The operating license should not be issued until the county plan has been revised to provide a procedure for

estimating the number of people that will need special transportation and a procedure for keeping the list up to date; and until there are demonstrated adequate provisions that will allow people without transportation to call in and arrange for it.

Contention 16.1.

There are not enough vehicles available to provide transportation for those who do not have their own means of transportation.

72. The plan provides that the people who need special transportation because they do not have a vehicle or because they temporarily do not have a vehicle will be transported by school buses. The buses for this will be available after they have evacuated school children to a host county or taken them home. This situation will exist when the schools are in session. The buses may not be available for two hours. The evacuation time study estimates that the special population can be evacuated in 2.5 hours. However that estimate may not be accurate because it did not consider the following factors:

a. No estimate of the time to load the buses at the schools when the children are evacuated or taken home has been made.

b. No estimate of the time to unload the buses at an evacuation center has been made.

c. The speed of a bus on an evacuation route will only be 20-30 mph if the children are being evacuated at the same time as the general population. That is the speed used in

estimating the evacuation times. This will increase the amount of time that it will take a bus to make a round trip.

d. There is no estimate of the time required for buses to take home students from schools that are not evacuated to a host county center, and there is no estimate of how long it will take them to get to Burlington or LeRoy after they have completed taking the children home.

e. There is no indication that unexpected delays have been considered, and there may be delays.

f. It will take 1/2 hour to load evacuees on the buses.

g. There could be a substantial delay if buses need to be decontaminated before they are returned to the EPZ to pick up people needing transportation.

h. Adverse weather will increase the time that it takes the buses to travel when they evacuate school children and when they evacuate people without transportation. IPF 28.

73. If the people without transportation are to be evacuated in 2.5 hours there must be more buses. Those that are assigned to do this will not be able to do it in that amount of time if the children are in school and there are adverse weather conditions or other delays such as traffic on evacuation routes. As an example of this assume the following situation: The order to evacuate is given to the Burlington schools. 15 minutes later the buses are loaded and starting for Emporia. One hour after they start, they

are in Emporia and it takes them 15 minutes to unload and start the return. One hour later they arrive in Burlington. They are loaded in 30 minutes and clear the EPZ in another 15 minutes. That is a total elapsed time of 3 hours and 15 minutes. Under adverse weather conditions it would take longer. It will be the same situation for the schools that do not evacuate children to a host county but just take them home. While there is no estimate of the time it will take to take children home and have the bus ready to start for Burlington or LeRoy, it would probably take a minimum of 1.5 hours (after the children are loaded on the bus) to take them home in adverse weather and an additional .75 hours to get to a transportation pickup point. That does not leave enough time to load people and clear the EPZ in the estimated 2.5 hours. It will take longer than 2.5 hours.

74. If the people who need special transportation are to be evacuated from the EPZ in 2.5 hours, more transportation than is provided for under the plan must be provided. 10 C.F.R. 50.47(b)(8) requires that the county plan provide adequate equipment to support an emergency response. Until there are adequate transportation facilities for the people without transportation, that requirement is not met by the plan.

75. There are not enough vehicles assigned to pick up people who need transportation and take them to a point where they will be loaded on the evacuation buses. If they are to be evacuated in 2.5 hours, more vehicles will need to

be assigned. Road Department personnel can begin picking up people who need to be taken to bus pickup points 45 minutes after the decision to evacuate is made. Only 11 workers from the Road Department will be assigned to that duty. The Engineer, Bowers, is not certain how long it will take to pick up the people and take them to the bus pickup points, but he estimates that it may take 1 1/2 hours. All 120 people identified to date as needing special transportation will have to be picked up and taken to the bus pickup points. The exact location of these people is not known. If it takes 30 minutes to load them on the buses and 15 minutes to clear the EPZ, the evacuation time is 3 hours. IPF 28.

76. The operating license should not be issued until the plan has been amended to show that there is enough transportation equipment to evacuate the people without transportation; until it is demonstrated that the equipment is available; until the evacuation time estimate for people without transportation is revised to show the longer time required to evacuate those people; and until it is demonstrated that the revised time is acceptable.

Contention 16.m.

The engineer has not made arrangements to obtain the school buses.

77. The letters of agreement that have been signed by Coffey County for the use of the school buses of the USD School Districts No. 243 and 245 are not part of the plan. There is no signed agreement with the Burlington School District No. 244 to provide the buses that the county needs

for special transportation. The letters of agreement should be in the plan. In some instances the buses are owned by private companies, and it is not certain if those companies are part of the agreements. IPF 29.

78. 10 C.F.R. 50.47(b)(8) requires the county to provide adequate emergency equipment to support an emergency response. That requirement is not met because the county cannot assure that it has enough buses unless there is a signed agreement to provide them. Also, NUREG-0654, A.3., requires that agreements for the buses be made part of the plan, and they are not.

79. The operating license should not be issued until the county obtains signed agreements from all the school districts or private companies that will furnish buses and until the signed agreements are made part of the plan and approved by FEMA.

Contention 16.n.

The county plan is deficient because the school buses listed in Table 3-8 (now Table 3-7) will be required for evacuation of school children and will not be available to provide other emergency transportation.

80. If school is in session the buses will be used to evacuate the children to a host county or to take them home. The buses will only be available to assist with special transportation after the students are evacuated or taken home. These same school buses will be used to evacuate patients from the nursing homes and the the hospital. They will also be used to evacuate people who do not have transportation and children at private schools and day care

centers. The buses will return to the EPZ to evacuate those that need special transportation. This may be 2 hours after the decisions to evacuate is made. In that period of time the people waiting for buses could be exposed to radiation. IPF 30.

81. 10 C.F.R. 50.47(a)(1) requires the county to develop a plan that will provide adequate protective measures. It is difficult to for a plan to be adequate if some segments of the population in the EPZ must wait to be evacuated while others are being evacuated from potential harm. That is inequitable and a grossly inadequate plan. Those that must wait on the buses are being exposed to unnecessary risks. Included among those that must wait are young children from the day care centers, and such children are highly susceptible to injury from radiation.

82. The operating license should not be issued until the plan is revised to provide that the people described in paragraph 80 will be evacuated at the same time as the students at the schools are evacuated or taken home; and until it is demonstrated that the county has the equipment and workers to do this.

Contention 18.a.

The County Plan does not provide for enough traffic control. There is too little traffic control provision within the ten mile EPZ.

83. There are only 5 traffic control points, and there is no traffic control point in Burlington. There is no traffic control point in the vicinity of John Redmond Reservoir, and the transients at the reservoir may not be

well acquainted with the county. The evacuation routes are the quickest way to the registration centers, and people cannot be kept on the evacuation routes if there is no traffic control on them. Use of the designated routes helps to provide a smooth flow of traffic and facilitates public response. IPF 31.

84. 10 C.F.R. 50.47(b)(10) requires the county to provide protective actions for the public. Such a protective action is evacuation to the host counties in the most rapid manner possible. If there is not adequate traffic control, there will be delays in the evacuation to the host counties. As indicated in paragraph 83, the evacuees will get to the registration centers quickest if they use the evacuation routes, but they will not use those routes if there is not traffic control on them.

85. The operating license should not be issued until the plan has been revised to provide substantially more traffic control on the evacuation routes.

Contention 18.r.

The County Plan is deficient because it does not provide that the entire evacuated area will be blocked. It only contemplates that it will be blocked as resources become available.

86. All Roads must be blocked by having workers stationed at each road into the EPZ, and this needs to be specified in the plan. The plan does not provide that all roads into the EPZ will be so blocked even though the applicants say that will be the case. The plan provides

that the roads will be barricaded, but they will be unmanned except for the 6 priority roadblocks. IPF 32.

87. NUREG-0654, J.10.j., requires the county to control access to the evacuated areas. Access cannot be adequately controlled if only the priority roadblocks are staffed. FEMA testified that all roads need to be blocked by workers. The applicants indicate that this will be done by the National Guard, but that is not in the plan.

88. The operating license should not be issued until the plan is revised to provide that all access roads into the EPZ will be blocked by having National Guard personnel or other workers stationed at each road into the EPZ.

Contention 18.aa.

The sheriff does not have enough personnel to secure the evacuated area on a 24 hour per day basis.

89. The Sheriff's deputies, some road department personnel, and national guard personnel will provide security for the EPZ. They will staff the access control points, block other roads in to the EPZ, and patrol the perimeter of the EPZ. If the level of contamination reaches a high enough level, the access control points will be moved to a safe position. IPF 33.

90. NUREG-0654, J.10.j., requires the county to control access to the evacuated area. If access points are moved back, this requirement is not met under the provisions of the current plan. In that case, people may not know the new location of the access points. Also, and more importantly, if access points would need to be moved to new

locations, it is almost certain personnel blocking the other roads and patrolling the perimeter would need to be moved back to new locations. Such changes expand the perimeter of the EPZ. Therefore, more roads will need to be blocked in order to keep people from entering the EPZ. The plan does not cover this possibility which requires that more people be assigned to security. There is no evidence enough people are available to provide security if that happens.

91. The operating license should not be issued until the plan is revised to provide how the relocation of access control points, other roadblocks, and perimeter patrol will be handled; and until the applicants and the county demonstrate that they have enough personnel to secure the EPZ after the relocation.

Contention 19.e.

There is no person designated or trained to act for the radiological Defense Officer if he is not available or is to be relieved during an accident.

92. The plan merely mentions that there will be an alternate designated for the Radiological Defense Officer. The plan does not actually indicate who that will be. A trainee for the position has been selected, but he does not have the training required to act as the alternate. IPF 34.

93. 10 C.F.R. 50.47(b)(1) requires the county to have enough staff to respond and to carry out its plan. That cannot be done if no alternate person is available to act for the Radiological Defense Officer when he is absent or needs to be relieved. The plan must designate such a person

by title, and that person must be fully trained to assume the duties of the Radiological Defense Officer.

94. The operating license should not be issued until the plan is revised to designate specifically by title the person who will act as the alternate for the Radiological Defense Officer and until the person designated as the alternate is trained and qualified.

Contentions 19.h. and 19.i.

19.h. The County Radiation Monitoring Team has not been selected.

19.i. The County Plan is deficient because it does not state how many members of the Radiological Monitoring Team will be required, and does not contemplate enough people to handle the duties of the Radiological Monitoring Team.

95. The plan does not specify how many people will be on the team. Forty-eight people who will serve on the team have received some training; however they have not been assigned to the joint radiation monitoring teams or to the access control points. A list of the team members should be in the plan and it should show the names of the members of the team and their assignments. IPF 35.

96. NUREG-0654, I.8., requires the county to provide the expertise to assess potential radiological hazards, and it requires the field team composition to be described in the plan. The details in the plan are not adequate to show how many people will be on the team and the duties that each member of the team is to perform. FEMA testified that a list of the team members and their duties should be part of the plan. There is inadequate assurance that the county can

provide the radiation monitoring when so few details about the team are set forth in the plan.

97. The operating license should not be issued until the plan is revised to show the members of the team by name and their assignments as a member of the team.

Contention 19.k.

Coffey County will not be able to perform decontamination and radiation checks within the County and at the evacuation centers, because it is not adequately staffed. There is no provision in the County Plan for an adequate number of personnel to supplement the County Radiation Monitoring Team in order to check evacuees and vehicles at shelters for contamination. The Coffey County Plan shows 104 people will be needed at the evacuation centers for contamination checks (page 3-8). None of these are available. At least 150 will be needed for this. The plan does not specify how they will be recruited. Also, there are no people available at the evacuation centers to handle decontamination. It is possible that as many as 100 people will be required for decontamination.

98. In the event of an evacuation The following number of people could come to each of the host counties: Lyon, 6863; Allen, 1247; Anderson, 3873; and Franklin, 1770. It will take 2 1/2 minutes to check each of the evacuees for contamination. This is to be done in 12 hours. In order to do it in that period of time the following number of radiation monitors will be needed in each of the host counties: Lyon, 24; Allen, 5; Anderson, 13; and Franklin, 7. The host counties will provide the following number of monitors to handle the checks: Lyon, 12; Allen, 4; Anderson, 6; Franklin, 4. During the radiation check each person will be "spread eagled" and the monitor will be passed all over the person. The radiation monitors in the host counties who will do the checks have not been recruited

and trained. If a person is decontaminated at a registration center, the person will again be checked for contamination, and the same monitors that do the check will to the recheck. That recheck will take as long as the original check. The same monitors will also check cars for radiation after the cars are decontaminated. The checks of vehicles will come after the people are checked and rechecked for contamination. There is no relief provided for the monitors in the host counties. IPF 36.

99. NUREG-0654, J.12., requires the county to be able to monitor the evacuees in 12 hours at the registration centers, and 10CFR 50.47(b)(1) requires the county to have adequate staff to respond to its plan. Based on the facts in paragraph 98, the county will not be able to monitor the potential number of evacuees that come to the registration centers in a 12 hour period because not enough monitors will be assigned. In fact the monitors have not even been recruited or trained. Additionally, the plan is deficient because there are inadequate plans for rechecking people after they are decontaminated, and there are no monitors assigned to check cars after they are decontaminated. Under the plan all of this is to be done by the monitors who will check the people when they come to the evacuation centers. That overburdens them and causes unnecessary and potentially harmful delay to evacuees. If a significant number of people need to be rechecked after they are decontaminated, this should be done as soon as possible. When that is done,

the checking of the other evacuees will be delayed. The plan has not considered that possibility. Additionally, it will not be desirable to delay the checks on vehicles that are decontaminated. That will delay evacuees and cause them to have to remain at the registration centers longer than is desirable. Finally, there is no relief provided for the monitors. Under the plan they would have to work shifts of more than 12 hours. The plan is also deficient because it does not provide that women will be checked for contamination by women monitors. A significant number of women who are in a spread eagle position will not want to be checked by a man.

100. The operating license should not be issued until the plan is revised to show that enough monitors will be available in the host county to provide the monitoring for the evacuees and their vehicles. The number of monitors required to make the initial check of evacuees is set forth in paragraph 98. The plan should provide that there will be additional monitors for rechecking evacuees after decontamination and for checking vehicles for contamination and after decontamination. Women should be checked for contamination by women monitors. Finally, there should be enough monitors trained in the host counties so that they can provide relief for the monitors that start the process.

Contention 19.1.

The fire leader does not have enough personnel to conduct the decontamination activities.

101. There are signed agreements with the city fire departments that will provide workers for decontamination at the access control points. The agreements have not been made part of the plan, and they should be part of the plan. The agreements have not been reviewed by FEMA. The agreements provide that the fire departments will provide equipment and workers that can be "mustered". IPF 37.

102. 10 C.F.R. 50.47(b) (1) requires that the county have enough staff to carry out a response such as decontamination at the access control points. Additionally, NUREG-0654, A.3., requires that agreements between the county and other organizations that have a role in the response be included in the plan. The plan is deficient because the agreements with the fire departments are not part of the plan. Additionally, there is no assurance that the workers will be available at the time of an emergency because the agreements do not bind the fire departments to provide a specified number of workers. Rather, they are only required to provide the workers that they can muster or are available.

103. The operating license should not be issued until the agreements with the fire departments are modified to guarantee that the workers will be available to assist with access control and until the agreements as modified are made part of the plan.

Contention 19.r.

The Coffey County Radiation Monitoring Team does not have proper radiation monitoring equipment to monitor radiation in the event of an evacuation.

104. The radiation monitoring team does not have the air sampling equipment that is needed. FEMA testified that this equipment should be described in the plan, and it is not. The equipment has been ordered but it is not available at this time. IPF 38.

105. NUREG-0654, H.7., requires the county to provide offsite radiological monitoring equipment. The equipment described in paragraph 104 must be available if that requirement is to be met.

106. The operating license should not be issued until the air sampling equipment is available to the county and until the plan has been revised so that the equipment is described in the plan.

Contention 19.aa.

The Coffey County Radiation Monitoring Team does not have the communication equipment it needs to keep in touch with the County Emergency Operations Center and others. The Coffey County Plan is deficient where it provides that the Radiation monitoring team will communicate with the County EOC by telephone. In all likelihood, there will not be enough telephone lines available so that prompt communication can be accomplished.

107. The joint radiation monitoring teams do not have portable radios that will permit the teams to talk directly with the county EOC. Presently such communications are relayed to the EOC from the plant Emergency Operations Facility. IPF 39.

108. NUREG-0654, F.1.d., requires the county plan to include communications that permit the radiation monitoring teams to communicate with the county EOC. This requirement is not met if they cannot communicate directly with the EOC.

They will need to communicate with the EOC about conditions in the field that will influence emergency response decisions by the county. Those decisions are of such significance that the teams should be able to communicate directly with the EOC.

109. The operating license should not be issued until the plan is revised to provide that the joint radiation monitoring teams will have portable radios that permit them to communicate directly with the county EOC and until such portable radios are available for the use of the teams.

Contention 19.hh.

The State Plan does not assume all evacuees will be checked for contamination. The Coffey County Plan does so. The County Plan is deficient because it does not require that all evacuees go to the designated shelter area outside the evacuation zone for a contamination check. Once the evacuees are out of the area, it will not be possible to adequately notify them to go for a contamination check. It must be clear in the plans that all evacuees will be checked for contamination.

110. The Evacuees are to go to the registration centers for evacuation checks. At the present time the brochure for public information and the EBS announcements do not make that clear. That information should be in the public information materials distributed in advance and the EBS announcements. It is not. IPF 40.

111. NUREG-0654, J.12., requires the county to describe the means for monitoring evacuees at the registration centers. Implicit in that is that the plan should direct the evacuees to the centers so they can be

monitored for contamination. The plan in its present form does not do that. FEMA testified that such directions to the evacuees should be in the EBS announcements, and Dennis Miletic testified that it would be helpful if such information was in other public information materials.

112. The operating license should not be issued until the plan is revised to provide that the information to be distributed as educational material to the public and the EBS announcements will contain specific directions to the public that they need to go to the registration centers for contamination monitoring.

Contention 19.kk.

The County Plan is deficient because it does not provide for disposal of contaminated equipment, vehicles, decontamination water, or any other materials that might be contaminated.

113. Certain of the materials that are contaminated will be disposed of at the plant site. The plant may not be available for that purpose because of contamination at the site. If the plant is not available as a disposal site, the material might be disposed of at other commercial sites.

There are no agreements with such commercial sites.

Disposal of contaminated water has not been agreed to by the host counties. IPF 41.

114. NUREG-0654, K.5.b., requires that the county provide for the disposal of contaminated wastes. This requirement is not met because disposal of wastes at the plant site is uncertain; there have been no arrangements made with other disposal sites if the plant site is not

available; and the host counties have not agreed to disposal of contaminated water through their disposal and waste systems.

115. The operating license should not be issued until the plan is revised to provide for the disposal of wastes at sites other than the plant site and until signed agreements with such other sites have been made part of the plan.

Additionally, The county should obtain a written agreement from the host counties that indicates they will permit the disposal of contaminated water through their waste systems, and such agreements should be made part of the plan as required by NUREG-0654, A.3.

Contention 20.d.

There are no people available to provide management at the evacuation centers. Up to 9000 people would be evacuated. One person for each 50 people evacuated will be needed. Therefore, 180 people are required.

116. The number of evacuees specified in paragraph 98 may come to each county. All of these will need to be registered. 20-30% will need shelter and probably food. The number of people estimated to be needed as workers for registration in the host counties is as follows: Franklin, 11 school personnel; Lyon, 48 service club members; Anderson, 28 school personnel; and Allen, 10 school personnel. These workers have not been selected. There are no signed agreements with the organizations that will provide the workers that indicate the workers will be available to handle the registration. The school personnel have been volunteered by the administrators of the school

districts. FEMA has not verified if the workers will be available and has not analyzed if the number of workers required for registration is adequate. IPF 42.

117. There are no written agreements with the agencies and organizations that are to provide workers to assist in the management of the shelters in the host county. IPF 43.

118. 10 C.F.R. 50.47(b) (1) requires that the county arrange for enough workers to provide the registration, sheltering, and feeding in the host counties. This has not been done, so the plan is not sufficient. Additionally, NUREG-0654, A.3., requires that there be signed agreements with the organizations that will provide the workers and that the agreements be made part of the plan. There are no such agreements, so the plan is deficient.

119. The operating license should not be issued until the county plan has been revised to indicate that there are enough workers available to provide the registration, sheltering, and food service for the evacuees. Additionally, the license should not be issued until the applicants provide satisfactory evidence that the workers required for those duties have been recruited and trained. Finally, signed agreements that provide that the workers who are to provide the services for registration, sheltering, and food service should be obtained from the agencies providing the workers; and the agreements should be made part of the plan before the operating license is issued.

Contentions 20.k. and 20.m.

20.k. There are not enough facilities for 9,000 evacuees at the shelter center. This will require sleeping, food preparation, medical, sanitation, and other facilities if the shelter needs are to be met. The County Plan does not provide details about the extent of the resources required for food, sleeping, safety, health and sanitation, communications, recreation and religious affairs.

20.m. There has been no provision made about paying shelter owners for the use of their site or services.

120. The registration centers will be used for registration and the assignment of shelter to evacuees. There are no signed agreements with schools for the use of their facilities as registration centers. There are no signed agreements with any organization, agency, school district, or other owner of a shelter facility that provide that the shelter can be used by evacuees. There are no signed agreements with any owner of a food service facility that provides that the facility can be used to provide meals for evacuees. IPF 44.

121. 10 C.F.R. 50.47(b)(8) requires that the plan provide for adequate emergency facilities to support the registration, sheltering, and feeding of the evacuees. Since there are no signed agreements with the owners of the facilities that will be used for those purposes in the host counties, the plan does not meet that requirement and is deficient. Without the agreements there is no assurance that the facilities will be available. Signed agreements are required by NUREG-0654, A.3., and should be made part of the plan as required by that element of NUREG-0654.

122. The operating license should not be issued until

the signed agreements described in paragraphs 120 and 121 are obtained and made part of the plan. FEMA should approve the agreements before they are made part of the plan.

Contention 25.a.

The County Plan is deficient because it does not provide for relocation of the Coffey County Emergency Operations Center in the event that it becomes necessary to evacuate it. It is unlikely that people will want to remain in the Emergency Operations Center when other offices in the Courthouse have radiation levels that are unacceptable.

123. Under certain circumstances, the EOC would not be available for use during an emergency. The plan does not provide for an alternate EOC. The alternate site would be in Emporia at the Lyon County Sheriff's office. There is no written agreement with Lyon County about using its facilities as the alternate site. IPF 45.

124. 10 C.F.R. 50.47(b)(8) requires that there be adequate facilities to support the county's response to an accident at the plant. Adequate facilities would include an alternate EOC if, for example, there was a fire that made the EOC and the sheriff's office inoperable.

125. The operating license should not be issued until the plan has been revised to provide for an alternate EOC in Emporia that has adequate communications equipment to meet the responses provided for under the plan. Additionally, there should be a signed agreement with Lyon County that permits the use of its facilities as the alternate EOC, and such agreement should be made part of the plan as required by NUREG-0654, A.3.

Contentions 28.a., 28.b., 28.d., and 28.e.

28.a. The County Plan does not specifically detail how many dosimeters will be needed and what kind will be used.

28.b. There are not enough dosimeters for emergency personnel.

28.d. There is no plan specified for issuing dosimeters to County emergency workers.

28.e. The radiological Defense Officer has not developed a system for controlling radiological exposure of emergency workers.

126. The Applicants have indicated that each worker will be issued a self reading dosimeter and a TLD; however, the plan does not indicate that all the workers will receive the dosimeters. The plan should show a breakdown of workers by class that will receive dosimeters and also show the number of workers that will be in each class. The county will issue dosimeters of each type to certain classes of workers; however, the classes are not listed in the plan even though they have been described in the testimony of the Radiological Defense Officer. The host county workers doing radiation checks and decontamination work should have dosimeters. The workers at any John Redmond Reservoir agency (ACE, USFW, KFG) should have dosimeters. IPF 46.

127. The dosimeters to be issued to workers when they start work will be prepositioned at various locations. The workers will pick up the dosimeters at a prepositined point. The plan itself does not list where the the dosimeters will be prepositioned or where the workers in each class will pick up their dosimeters. The plan should list where the dosimeters will be prepositioned and where each worker will pick up the dosimeters. The dosimeters have not been prepositioned. Fire department workers and ambulance and

funeral directors' personnel will pick up dosimeters when they come in to the EPZ, but this is not in the plan. There should be plans for issuing dosimeters for host county workers who will need them and for John Redmond agency workers who perform duties as part of the emergency plan. The plan does not make provision for issuing the dosimeters to such host county and John Redmond agency workers. IPF 47.

128. Workers will periodically turn in the TLD's and be issued a replacement. The replacement dosimeters will be stored at the Wolf Creek plant site. The replacements would be brought in from the plant after the emergency started. The storage site for the TLD's should be changed and the new site specified in the plan. IPF 48.

129. The host counties and the John Redmond Reservoir agencies (ACE, USFW, KFG) do not have plans for recording dosages received by their workers who are issued dosimeters. IPF 49.

130. NUREG-0654, K.3., requires that the county make provision for 24-hour-per-day capability to determine doses received by workers, make provisions for issuing both type of dosimeters, to insure that dosimeters are read at appropriate intervals, and to maintain dose records for workers. The county plan fails to meet those requirements for the following reasons:

a. The plan does not specify that all workers who might be exposed to radiation will have dosimeters.

b. The plan does not show which workers will receive the dosimeters and does not contain a list recommended by FEMA that shows the categories of workers that will receive dosimeters and the number of workers in each category.

c. There is no evidence that the host counties or the John Redmond Reservoir agencies have plans to issue dosimeters even though dosimeters should be issued to their workers who might be exposed to radiation. There is nothing in the plan about this.

d. Extra TLD's will be stored at the plant site and might not be available because of radiation or other problems caused by the accident that requires the alert.

e. The plan does not specify where the dosimeters will be prepositioned and does not show where the workers will pick up dosimeters.

f. The dosimeters have not been prepositioned.

g. The plan does not specify where fire department workers and ambulance and funeral directors' personnel coming into the EPZ will pick up the dosimeters.

h. The plan does not provide for recording doses received by host county or John Redmond Reservoir agency workers.

131. The operating license should not be issued until the plan is revised to correct the deficiencies listed in paragraph 130. Additionally, the license should not be issued until all dosimeters required by the plan are prepositioned at the proper location.

Contention 29.c.

The Coffey County Emergency preparedness Coordinator has not developed the training programs needed to implement the County Plan, and has not made adequate plans to familiarize Coffey County personnel with the plan and their responsibilities.

132. The course content of the joint training program, including learning objectives, lesson plans, supplemental materials, and implementing schedules, has not been developed. IPF 50.

133. NUREG-0654, 0.5., requires the county to provide for the initial training of the emergency response workers. This cannot be done if the joint training program described in paragraph 132 has not been prepared.

134. The operating license should not be issued until the details of the joint training program have been completed and adopted by the county.

Contention 29.g.

The County Plan should specify in detail the type and amount of training that individuals will receive. The training to be provided to the positions listed in Table 5-1 should be specified in detail.

135. Table 5-1 lists the various parts of the joint training program. Each worker will receive training for the parts of the plan indicated on the table. According to witnesses Lewis and Wilcox, the table is to be revised to show that certain workers will receive training for more parts of the joint training program than is shown on Table 5-1. There is no plan to give training for any part of the joint training program to county commissioners, sheriffs, or emergency preparedness coordinators of the host counties. They have specific duties under the plan. Table 5-5 does

not reflect the training that the John Redmond Reservoir agency workers (ACE, USFW, KFG) are to receive. IPF 51.

136. NUREG-0654, O.1., requires that the county assure the training of appropriate individuals, and NUREG-0654, O.5., requires that it provide initial training for personnel with emergency response responsibilities. These requirements are not met because table 5-1 does not show that certain workers will receive training that is needed. The applicants and FEMA have testified that certain categories of workers will receive more training than is shown on Table 5-1, and that training is essential if they are to be able to perform their duties. Additionally, the requirements are not met because the host county officials described in paragraph 135 will not be trained. They have specific essential jobs under the plan, so they must receive training for the appropriate categories shown on Table 5-1.

137. The operating license should not be issued until Table 5-1 of the county plan is revised to reflect the changes that the witnesses for the applicants and FEMA have indicated are necessary and until the plan is revised to reflect that the host county officials described in paragraph 135 and the workers at the John Redmond Reservoir agencies will receive training in the appropriate categories shown on Table 5-1.

Contention 29.h.

The text of Contention 29.h is at p.85.

138. The workers specified in the contention have not been trained. Additionally, the workers who will serve on

the joint radiation monitoring teams have not received the special training that they need to serve on the teams. 21 workers will serve on the teams or as alternates for the teams. Those 21 have not been selected. The remainder of the workers who will serve as radiation monitors have not received all of their training. IPF 52.

139. NUREG-0654, O.1., requires that the county assure the training of the workers. This requirement has not been met because the workers listed in this contention, particularly those who will have radiation monitoring responsibilities, have not completed the joint training program, and where appropriate, the required radiation monitoring training.

140. The operating license should not be issued until the workers described in this contention have received the training specified for them in Table 5-1; and until the workers with radiation monitoring responsibilities have received all necessary training.

Contention 29.k.

The training program does not adequately consider how to deal with changes in personnel and in volunteers who are trained. There will be a very substantial turnover that must be dealt with.

141. Details of how the retraining program will be conducted are not in the plan. The materials for training new people have not been prepared. All the workers who are replacements should get training comparable to the workers that were replaced. IPF 53.

142. NUREG-0654, O.5., requires the county to train all workers who have emergency responsibilities. This includes workers who are replacements. FEMA testified that the replacements should get training comparable to the training received by the person replaced. Details of the program should include provisions that the replacements will receive such comparable training. The requirement of NUREG-0654, O.5., has not been met because the details of the program are not in the plan and the materials for the program have not been developed.

143. The operating license should not be issued until the details of the replacement training program are included in the plan and the materials needed to implement the program are prepared.

Contention 29.q.

The state does not have adequate plans to train State personnel having emergency responsibilities. The Bureau of Radiation Control is responsible for supporting and developing conduct of radiological emergency response training but has not established plans or courses for providing such training.

144. Table O-1 of the State Plan does not reflect the training that the state workers will be given. Leon Mannell has testified that some of the workers should receive more training than is shown for them on Table O-1. IPF 54.

145. NUREG-0654, O.5., requires the state to provide training for its workers. Implicit in this requirement is that the training be adequate to prepare the workers to do the jobs assigned to them. In order to do their jobs Leon Mannell testified that they need more training than is

indicated in Table O-1. Therefore, the NUREG-0654 requirement specified in this paragraph is not met.

146. The operating license should not be issued until Table O-1 is revised to reflect the changes that Leon Mannell has indicated need to be made in the table.

Contention 29.s.

The text of Contention 29.s is at p.88.

147. The state workers described in the contention are not trained to perform the functions assigned to them under the plan. They have not been trained in all the appropriate categories listed under Table O-1. IPF 35.

148. 10 C.F.R. 50.47(b)(15) requires that emergency response training be provided to emergency workers of the state. The training that they need has not been given.

149. The operating license should not be issued until the state workers have received the training that is to be given to them under Table O-1.

Contention 29.u.

The following federal personnel lack sufficient training to perform their assigned functions:

- (1) U.S. Army Corps of Engineers personnel
- (2) U.S. Fish and Wildlife Service personnel

150. The personnel listed in the contention have not received the training under the joint training program. They should receive the same training as the Kansas Fish & Game Commission personnel except for some radiation survey instrumentation training. IPF 56.

151. 10 C.F.R. 50.47(b)(15) requires that the personnel described in the contention be trained to provide the duties that they have under the plan. They have not met

the requirement of 10 C.F.R. 50.47(b)(15) because they have not received the training prescribed for them under the joint training program.

152. The operating license should not be issued until the workers specified in the contention successfully complete the training program that will be outlined for them under Table 5-1 of the county plan.

Contention 31.c.

The fire departments of Burlington and other cities in Coffey County do not have radio equipment which is needed to communicate with the Sheriff's office.

153. The new radio system which will be installed will give the fire departments the ability to communicate with the Sheriff's office and the EOC. They are to give the warning to people who need special notification and are to assist with access control. IPF 57.

154. 10 C.F.R. 50.47(b)(6) and NUREG-0654, F.1., require that the fire departments be able to communicate with the sheriff at his office or the EOC. The duties of the departments' personnel will require that they be able to communicate with the sheriff and that the sheriff be able to contact and direct them in regard to their responsibilities.

155. The operating license should not be issued until the fire departments have the capability of communicating by radio with the sheriff's office.

Contention 31.d.

The Coffey County Road Department needs radio equipment for its vehicles to communicate with the Sheriff and others in the event of an emergency.

156. At the present time the road department vehicles do not have radio equipment that will permit them to communicate with the Sheriff and the EOC. The equipment is on order and will be installed later. Many of the duties that the road department workers have during an emergency will be in areas where radio will be the only adequate form of communication with the sheriff's office and the EOC. IPF 58.

157. 10 C.F.R. 30.47(b)(6) and NUREG-0654, F.1., require that the county vehicles be able to communicate by radio with the Sheriff's office and the EOC, and until the new radios are installed and operating that requirement is not met. The Road Department workers duties during an emergency are such that vehicle-radio will in many instances be the only adequate type of communication with the Sheriff's office and the EOC. They will often be in remote areas of Coffey County.

158. The operating license should not be issued until the road department vehicles have radios installed that will permit them to communicate with the Sheriff's office and the EOC.

Contention 31.f.

Protection gear against radiation is needed for all workers who are involved in the evacuation plan. Three hundred fifty people will be involved in three shifts. If so, 116 sets of protective gear are required.

159. The field radiation monitoring teams will need protective clothing. The only protective clothing that is available is at the plant site. The protective clothing

would be needed after the accident at the plant site occurred. The plan does not require protective clothing for workers. IPF 59.

160. 10 C.F.R. 50.47(b)(11) requires that the county establish means to control radiological exposures for emergency workers. Since the field radiation monitoring teams might need protective clothing, the plan should make provision for that so that the requirement cited can be met. At the present time the plan does not make any provision for providing the protective clothing to the field radiation monitoring teams. Additionally, the plan will not meet the requirements of 10 C.F.R. 50.47(b)(11) if the protective clothing is stored at the plant site. The nature of the accident at the plant might be such that the clothing would not be available.

161. The operating license should not be issued until the plan is revised to provide that protective clothing will be made available to the field radiation monitoring teams; until the plan indicates where the clothing will be stored (other than at the plant site) and how it will be issued; and until the clothing is prepositioned and available for use.

C. WAVERLY CONTENTION AND STIPULATION

1. On December 8, 1983, the Intervenors filed a motion for a new contention concerning a change to EPZ involving the town of Waverly. Following negotiations among the parties, a stipulation (All Parties Ex. 1) was reached on

the resources and procedures for emergency planning for Waverly. The stipulation further provided that Intervenor would withdraw the new contention and that their remaining contentions would not be interpreted to include the town of Waverly. The stipulation was approved by the Licensing Board. Tr. 2003. Memorandum and Order (Granting Intervenor's Motion to Add Contention and Witnesses), dated January 5, 1984.

2. The applicants should revise the County Plan to reflect the conditions specified in the Waverly stipulation. The operating license should not be issued until the plan is so revised and until the Applicants and Coffey County have demonstrated that they have met all the conditions in the stipulation.

III. CONCLUSION

The matters examined during the evidentiary hearing which are not discussed in the Opinion were considered by the Board and found either to be without merit or not to affect the Board's decision herein. Findings of Fact and Conclusions of Law which are annexed hereto are incorporated in the Opinion. In preparing its Findings of Fact and Conclusions of Law, the Board reviewed and considered the entire record and the Findings of Fact and Conclusions of Law proposed by the parties. Those Proposed Findings not incorporated directly or inferentially in the Initial Decision are rejected as being unsupported by the record of

the case or as being unnecessary to the rendering of this decision.

Accordingly, for all the foregoing reasons the Applicants' application for a full power operating license for the Wolf Creek Generating Station, Unit No. 1, is denied, and it is this day ordered that the Director of Nuclear Reactor Regulation deny the application of the applicants for such license.

Intervenors' Findings of Fact

1. The Intervenors adopt for their findings the Applicants' findings of fact, Paragraphs 1-8, p. 64-68, in Applicants' Proposed Findings of Fact, Conclusions of Law, and Brief in The Form of A Proposed Initial Decision.

Contention 1.e.

The County Plan does not make adequate provision for how the sheriff will notify the U.S. Army Corps of engineers, U.S. Fish and Wildlife Service, and the Kansas Fish and Game Commission when the warning function is activated. The evacuation time will, therefore, be longer than estimated.

2. The tone alerts have not been installed at the headquarters of each of the three John Redmond Reservoir agencies (ACE,USFW,KFG). Tr. 1150(Wilcox). Additionally, the offices of the agencies are not open 24 hours per day except for the ACE's which is open 24 hours per day during the summer months. Tr. 940, 1150(Wilcox). The primary means of notifying the agencies is by phone, but there is no backup because the tone alerts are not installed. Applicants, at 4(Wilcox).

Contention 1.i.

The county plans does not specify who the Fire Leader is to notify if a fire chief is not available.

3. There are no assurances that there is an adequate alternate to the fire chief. Applicants, at 7(Wilcox); Tr. 1150(Wilcox). The alternate needs to be specified in the plan so that the alternate can be notified if the fire chief is not available. Tr. 1749(Leonard). The plan specifies

that the fire chief is to be given a notification.

Applicants' Ex. 1, p. 3-23.

Contention 2.b.

Ten or twelve additional people will be required to handle telephone calls at the Coffey County Emergency Operations Center. None of these people are available.

4. No one at the EOC is assigned this responsibility. Applicants, at 11(Wilcox); Tr. 940-947(Wilcox). There will be sheriff's dispatchers at the EOC, but they are not assigned any responsibility for this duty. Tr. 643(Freeman); Tr.1767(Leonard); Tr. 946-947(Wilcox); Applicants, at 11(Wilcox). The key people in the response organization will be at the Emergency Operations Center and they will be handling these calls. Applicants, at 11(Wilcox). There is no estimate of the number of call that will come in. Tr.947(Wilcox).

Contention 2.c.

The telephone system will not be adequate. There will not be enough lines in the event of an emergency.

5. There is only one telephone line at the Engineer's office. Calls will come to that line when people want to obtain transportation for evacuation. Two lines will be needed and used. One line is only enough for normal activities. Tr. 759(Bowers).

Contention 3.a.

The sheriff needs radio equipment that will permit him to talk to the Wolf Creek plant and all of Coffey County.

6. The present radio communications equipment of the sheriff does not permit him to communicate by that equipment with the plant. Tr. 945(Wilcox). New equipment is on order that will be installed and will permit him to communicate

with the plant by the use of that equipment. Applicants, at 13(Freeman); Tr. 644(Freeman). This is a primary and backup means of communicating with the plant. Tr. 644(Freeman).

Contention 6.g.

Due to insufficient staffing, Coffey County cannot adequately direct the evacuation. Although 2 personnel are required to perform this function, only the sheriff is presently available.

7. The sheriff is responsible for directing the evacuation. Applicants' Ex. 1, p. 1-16. The undersheriff who is supposed to assist him may have other duties assigned to him by the sheriff. Tr. 648(Freeman). These would be duties as a regular officer outside the EOC. There will be no relief for the sheriff during an accident other than the undersheriff. Tr. 650(Freeman).

Contention 8.c.

The County Plan does not provide an estimated evacuation time for individuals who do not have their own private automobiles for transportation. There is no estimate of evacuation time for them.

8. The footnote at page K-19 of Applicants' Ex. 1 is incorrect. Tr. 1676-1677, 1707-1707(Stern). It needs to be corrected to show that the estimate is for all classes of the special population that need transportation. Tr. 1706-1707(Stern).

Contention 9.c.

The County Plan is deficient because the evacuation routes send the evacuees downwind and create greater risk to them in many instances. The plan needs to give adequate consideration to wind directions and possible changes in wind direction during an evacuation.

9. It will be necessary for the EBS announcements to deal with the wind direction if that is significant. Tr.1714(Stern). The information in the EBS announcements

may change due to changes in evacuation routes that are caused by the direction of the wind. Tr. 1840-1845 (Carroll, Leonard). Changes in the EBS announcements will be made at the time of the emergency. Tr. 1840-1845 (Carroll, Leonard).

Contention 9.e.

The County plan does not provide for alternate evacuation routes that will be necessary if there is heavy snow, rain, flooding, or fog.

10. There is nothing in the plan that that deals with the alternate routes specified in Contention 9.e. according to the testimony of the EPC for Coffey County. Tr. 966 (Wilcox).

Contention 11.a.

The County Plan is deficient because it is not possible under the plan to notify 100% of the population within five miles of the site within a fifteen minute period, and it is not possible to assure 100% coverage within 45 minutes for those persons who do not receive the initial notification and are within the ten mile EPZ. The evacuation time will therefore be longer than estimated.

11. Sirens will be used to warn some of the transients at John Redmond Reservoir. Applicants' Ex. 3A and Ex. 3B. The applicants have indicated that two more sirens will be installed at John Redmond Reservoir. Applicants' Ex. 3A and 3B; Tr. 208 (Swing).

12. Even with two more sirens there will be a portion of the area of the reservoir under the control of the USFW that will not be warned by the sirens. Applicants' Ex. 3B; Tr. 2140 (Swing). The plan does not detail how the warning will be made for that area as required by FEMA. FEMA I, at 13. This should be in the plan. Tr. 365 (Wingo). The plan does not meet the standards of FEMA 43 for warning people in

that USFW area. FEMA I, at 13. FEMA is not certain if the warning can be done in 45 minutes. Tr. 349(Wingo). This would be because the delay time from the decision to give the warning to the time the agency receives the notification has not been determined. Tr. 297(Carroll); Tr. 300-301(Wingo). Also the routes that will be used have not been specified so that an estimate can be made of how long it will take to cover the routes. Tr. 308-309(Wingo). The tone alert at the USFW office is not installed, so there is not a secondary means of notification. Tr. 1150(Wilcox).

13. People who are using boats in the middle of John Redmond Reservoir and have the boat motor running will not hear the siren warning. T2145, T2163(Swing). There will be people on the water who will not hear the warnings. Applicants, at 96 (Wilcox). The center of the reservoir can be used by people. Tr. 1247(Wilcox). There is no provision in the plan for warning these people.

14. the sirens and tone alerts will not cover the entire EPZ. Tr. 211-213(Swing). The plan does not specify how these people will be warned. Farmers in the fields would fall into that category. Tr. 213(Swing). FEMA has recognized that in some areas there are routes developed to provide warnings to farmers in the field. Tr. 325(Wingo). The EBS announcements should contain a statement that farm families should warn farmers in the fields. Tr. 428, 452, 453, 485(Mileti); Tr. 1255(Wilcox).

15. The plan only indicates in a very brief manner how people who cannot hear the siren or a tone alert will be warned. Applicants' Ex. 1, p. 3-4, p. H-8. At the present time the county is not able to identify where the individuals are located who will need the special warning. Tr. 980, 981, 984(Wilcox). There is no evidence of how long it will take to warn these people. The county will not initiate a program to contact people about the person's need for a special warning except that it will mention this in the annual mailing that goes to people in the EPZ and will contact doctors and some others for names that might need to be on the list. Tr. 981(Wilcox). None of the details of this are in the plan or the implementing procedures.

16. The plan does not include agreements with the various fire departments that commit them to provide personnel to make the warnings in LeRoy and Burlington. Applicants' Ex. 1, p.D-2.

Contention 11.e.

There is no provision about how to make the warning if one or more sirens fail to operate. The evacuation time will therefore be longer than estimated.

17. There is no evidence that there is any provision in the plan about what will be done if a siren fails to operate. Tr. 346(Wingo); Tr. 969(Wilcox). If a siren fails, the county would warn by running the area that would have been covered by the siren with sheriff's patrol cars. Tr. 968(Wilcox). There is no staff assigned to make such a warning. Tr. 969(Wilcox).

Contention 11.j.

There is no provision for testing or maintenance of the tone alerts. The evacuation time will therefore be longer than estimated.

18. There is no evidence that the plan contains any provisions for the testing and maintenance of the tone alerts. The plan for tone alert administration does not meet the standards of FEMA 43. FEMA I, at 10.

Contention 12.e.

There is no detail about how the educational material will be provided to transients.

19. The location for and the number of signs at John Redmond Reservoir to be used for the purpose of providing emergency information to transients at the reservoir have not been determined. Tr. 1331-1333 (Scott); Tr. 1609 (Lewis). The information that will be on the signs has not been developed. Tr. 1611 (Lewis). The signs are the primary means of providing public education material to the transients at the reservoir. Applicants' Ex. 1, p. 5-4.

Contention 12.s.

The County plan is deficient because in Section 3.3.1 the Public Information Officer will advise the parents where children have been evacuated to. This information should have been supplied to the parents at an earlier time. The plan does not make provision for providing such information.

20. The information about where the students evacuated to host counties will be taken in the host county should be in the plan and the public information material. FEMA II, at 57; Tr. 1915 (Carroll). It is included in the EBS announcements, but it is not in the brochure and other information provided before the emergency. Tr.

1916 (Carroll). It will be in the brochure. Applicants, at 66 (Scott).

Contention 13.b.

The County Plan does not provide for transportation for the evacuation of pregnant women and small children if they are evacuated before others. If buses or other means of transportation are used for them, then that transportation might not be available to others when there would be a full evacuation.

21. The plan does not provide for transportation for pregnant women and young children if they are to be evacuated before others. Applicants, at 69 (Wilcox); Tr 1138, 1140 (Wilcox). Instead, they will be evacuated with the others who need special transportation. Applicants, at 69 (Wilcox). This will occur after the school buses take the children home or evacuate them to host counties. Applicants, at 69 (Wilcox). Precautionary evacuations are desirable for this class of the population. Tr. 1709 (Stern). Special transportation should be provided for them so they can be evacuated ahead of others. Tr. 1921-1922 (Leonard).

Contention 14.a.

The teachers, school administrators, and children have not been trained about how to handle the evacuation, and there are no plans in the County Plan to specify how they will be instructed to deal with an emergency evacuation.

22. The plan does not provide for training children and teachers about how to respond during an emergency. Applicants' Ex. 1, p.5-5. Teachers need to know they have a role, and what their role is. Tr. 435, 510 (Mileti). Teachers in the Burlington schools will use their cars to assist in the evacuation, and will assist in evacuating the

children on the buses. Applicants, at 72 as amended (Bowers); Tr. 1930 (Carroll). School superintendents and principals will receive training. Applicants' Ex. 1, p. 5-5.

Contention 14.b.

There are not enough school buses available to evacuate school children.

23. The Burlington schools have 750 students. Applicants, at 72 as amended (Bowers). The maximum capacity of the Burlington buses is 659. Applicants, at 72 as amended (Bowers). Teachers' cars will be used to evacuate the students that are in excess of the buses' capacity. Applicants, at 72 as amended (Bowers). Thirty teachers' cars will be required to evacuate the students. Tr. 798 (Bowers). It is not certain if the 30 cars are available. Tr. 785 (Bowers). The arrangements for use of the cars is not set forth in written agreements with the school district or the teachers. Tr. 725 (Bowers). The plan itself does not specify that the teachers' cars will be used.

Contention 15.a.

The County Plan does not detail what type of health services will be provided for persons who are in institutions or under care on an outpatient basis prior to the accident. It does not specify which hospital they will be taken to. The plan does not consider the number of patients to be cared for.

24. There are no signed agreements with hospitals about accepting patients that are evacuated from the Coffey County Hospital and the Golden Age Lodge nursing home. Tr. 814, 816 (Mueller).

Contention 15.c.

Coffey County does not have sufficient transportation (ambulances, buses, etc.) to evacuate people from nursing homes and the Coffey County Hospital.

25. Ambulances and funeral directors vehicles will be used to evacuate the non-ambulatory residents of the Burlington Hospital and the Burlington nursing home. Applicants' Ex. 1, p. 3-6, 3-7, K-13. There are no signed agreements between Coffey County and the ambulance services that will provide the transportation. Tr. 1948-1950 (Carroll). There are no signed agreements between Coffey County and the funeral directors that will provide the transportation. Tr. 1942(Carroll). There should be such agreements. Tr. 1950-1951(Carroll).

Contentions 15.n. and 15.o.

15.n. The county health nurse has not compiled a list of county residents who are shut-ins or who may need special evacuation assistance.

15.o. The County Plan does not make adequate provision for preparing a list of county residents who are shut in or who may need special evacuation assistance, and does not make adequate provision for updating the list as changes occur.

26. The list of people who are shut-ins and will need special transportation assistance has not been fully prepared. Tr. 1142(Wilcox); FEMA II, at 77. The details for preparing the plan and keeping it up to date are not in the plan. The details of maintaining the list should be in the plan operating procedures; the hearing impaired should be identified on the list; and the EPC should certify annually the correctness of the list. FEMA II, at 76,78.

Contention 16.a.

The County Plan does not detail how many individuals will need transportation assistance that the County engineer is

to provide for an evacuation. There is inadequate detail about how the Engineer will know who to evacuate.

27. The plan does not provide how an estimate of those that need transportation will be prepared. FEMA II, at 83. This needs to be in the plan. FEMA II, at 83. There will be a telephone number that people can call for transportation if they need it. Applicants' Ex. 1, p. 3-8. The plan and procedures do not specify that number, and it should be in the public information brochure and the EBS announcements. FEMA II, at 79. Only one of the two lines that are needed to permit these calls to go through is installed at the engineer's office. Tr. 759(Bowers). There will be a list of people that need transportation, but the provisions for that are not in the plan. Applicants, at 83(Wilcox).

Contention 16.1.

There are not enough vehicles available to provide transportation for those who do not have their own means of transportation.

28. The plan provides that the people who need special transportation because they do not have a vehicle or because they temporarily do not have a vehicle will be transported by school buses. Applicants' Ex. 1, p. 3-6. The buses for this will be available after they have evacuated school children to a host county or taken them home. Applicants, at 89(Bowers); Tr. 696(Bowers); Tr. 1995(Carroll). This situation will exist when the schools are in session. The buses may not be available for two hours. Tr. 778(Bowers); Tr. 1681(Stern). The evacuation time study estimates that

the special population can be evacuated in 2.5 hours. Applicants' Ex. 1, p. 3-5. There is no estimate of the time to load the buses at the schools when the students are evacuated or taken home. Tr. 1989-1991 (Carroll). No estimate of the time to unload the buses at an evacuation center has been made. Tr. 1992 (Carroll). The speed of a bus on an evacuation route may be 20-30 mph if the children are being evacuated at the same time as the general population. Applicants, at 32 (Stern). That is the speed used in estimating the evacuation times. Applicants, at 32 (Stern). There is no estimate of the time that it will take the buses to take home the students from schools that are not evacuated to a host county center. Tr. 1995-1996 (Carroll). There is no estimate of how long it will take them to get to Burlington or LeRoy after they have completed taking the students home. Delays at registration centers and because of traffic will cause buses to be available at a time later than estimated. Tr. 779 (Bowers). It will take 1/2 hour to load evacuees on the buses. Tr. 1996 (Carroll) There could be a substantial delay if buses need to be decontaminated before they are returned to the EPZ to pick up people needing transportation. Tr. 1264 (Wilcox). Adverse weather will increase the time that it takes the buses to travel when they evacuate school children and when they evacuate people without transportation. Tr. 1997 (Carroll). Road Department personnel can begin picking up people who need to be taken to bus pickup points 45 minutes after the decision

to evacuate is made. Tr. 703(Bowers). Eleven workers from the Road Department will be assigned to that duty. Tr. 2319(Bowers). The engineer, Bowers, is not certain how long it will take to pick up the people and take them to the bus pickup points, but he estimates that it may take 1 1/2 hours. Tr.2342-2343. All 120 people identified to date as needing special transportation will have to be be picked up and taken to the bus pick up points. Tr. 763(Bowers). The exact location of these people is not known. Tr. 764(Bowers).

Contention 16.m.

The engineer has not made arrangements to obtain the school buses.

29. The letters of agreement that have been signed by Coffey County to obtain the use of the school buses of USD School Districts No. 243 and 245 are not part of the plan. Applicants' Ex. 1, p. D-2; FEMA II, at 86. There is no signed agreement with Burlington School District No. 244 to provide the buses that the county needs for special transportation. Tr. 2358-2359(Wilcox). The letters of agreement should be in the plan. FEMA II, at 86; Tr. 2013(Carroll). In some instances the buses are owned by private companies, and it is not certain if those companies are part of the agreements. Tr. 776-777, 793(Bowers).

Contention 16.n.

The county plan is deficient because the school buses listed in Table 3-8 (now Table 3-7) will be required for evacuation of school children and will not be available to provide other emergency transportation.

30. If school is in session the school districts will use the buses to evacuate the children to a host county or to take them home. Tr. 705, 789(Bowers). Patients from the nursing home and the hospital will use the buses to evacuate. Applicants' Ex. 1, P. 3-6. People who do not have transportation and children at private schools and day care centers will also use the buses to evacuate. Applicants, at 91(Bowers); Tr. 779-782(Bowers). The buses will return to the EPZ to evacuate those that need special transportation. Tr. 778-782(Bowers). This may be 2 hours after the decisions to evacuate is made. Tr. 778(Bowers); Tr. 1681(Stern). In that period of time the people waiting for buses could be exposed to radiation. NUREG-0654, p. 17.

Contention 18.a.

The County Plan does not provide for enough traffic control. There is too little traffic control provision within the ten mile EPZ.

31. There are only 5 traffic control points.Tr. 655-656(Freeman). There is no traffic control point in Burlington. Tr. 656(Freeman). There is no traffic control point in the vicinity of John Redmond Reservoir. Applicants, at 101(Freeman). The transients at the reservoir may not be well acquainted with the county. Tr. 657(Freeman). The evacuation routes are the quickest way to the registration centers. Tr. 657(Freeman). People do not keep on the evacuation routes if there is no traffic control on them. Tr. 656(Freeman). Use of the designated routes helps to provide a smooth flow of traffic and facilitates public response. Tr. 1690, 1714(Stern).

Contention 18.r.

The County Plan is deficient because it does not provide that the entire evacuated area will be blocked. It only contemplates that it will be blocked as resources become available.

32. The plan does not provide that all roads into the EPZ will be so blocked even though the applicants say that will be the case. Applicants, at 109(Bowers); Tr. 2041(Carroll). The plan provides that the roads will be barricaded and will be unmanned except for the 6 priority roadblocks. Applicants' Ex. 1, p. 3-8, 3-9.

Contention 18.aa.

The sheriff does not have enough personnel to secure the evacuated area on a 24 hour per day basis.

33. The Sheriff's deputies, some road department personnel, and national guard personnel will provide security for the EPZ. Applicants, at 116(Freeman). They will staff the access control points, block other roads in to the EPZ, and patrol the perimeter of the EPZ. Applicants, at 116(Freeman). If the level of contamination reaches a high enough level, the access control points will be moved to a safe position. Tr. 1528(Naylor); Tr. 1573-1574(Lewis).

Contention 19.e.

There is no person designated or trained to act for the Radiological Defense Officer if he is not available or is to be relieved during an accident.

34. The plan merely mentions that there will be an alternate designated for the Radiological Defense Officer. Applicants' Ex. 1, p. 1-11. The plan does not actually indicate who that will be. A trainee for the position has been selected, but he does not have the training required to

act as the alternate. Tr. 1411-1412(Naylor).

Contentions 19.h. and 19.i.

19.h. The County Radiation Monitoring Team has not been selected.

19.i. The County Plan is deficient because it does not state how many members of the Radiological Monitoring Team will be required, and does not contemplate enough people to handle the duties of the Radiological Monitoring Team.

35. The plan does not specify how many people will be on the team. Forty-eight people who will serve on the team have received some training; however they have not been assigned to the joint radiation monitoring teams or to the access control points. Tr. 1405-1406, 1409-1410(Lewis); FEMA II, at 112. A list of the team members should be in the plan, and it should show the names of the members of the team and their assignments. FEMA II, at 112; Tr. 2052(Carroll).

Contention 19.k.

Coffey County will not be able to perform decontamination and radiation checks within the County and at the evacuation centers, because it is not adequately staffed. There is no provision in the County Plan for an adequate number of personnel to supplement the County Radiation Monitoring Team in order to check evacuees and vehicles at shelters for contamination. The Coffey County Plan shows 104 people will be needed at the evacuation centers for contamination checks (page 3-8). None of these are available. At least 150 will be needed for this. The plan does not specify how they will be recruited. Also, there are no people available at the evacuation centers to handle decontamination. It is possible that as many as 100 people will be required for decontamination.

36. In the event of an evacuation The following number of people could come to each of the host counties: Lyon, 6863; Allen, 1247; Anderson, 3873; and Franklin, 1770. Tr.

524-525(Fritz). It will take 2 1/2 minutes to check each evacuee for contamination. Tr.1418(Naylor). This is to be done in 12 hours. NUREG-0654, J.12. In order to do it in that period of time, the following number of radiation monitors will be needed in each of the host counties: Lyon, 24; Allen, 5; Anderson, 13; and Franklin, 7. The host counties will provide the following number of monitors to handle the checks: Lyon, 12; Allen, 4; Anderson, 6; Franklin, 4. Tr. 1417-1418(Naylor). During the radiation check each person will be "spread eagled". Tr. 1541(Naylor). The radiation monitors in the host counties who will do the checks have not been recruited and trained. Tr. 1416, 1422(Naylor). If a person is decontaminated at a registration center, the person will again be checked for contamination, and the same monitors that do the check will to the recheck. Tr. 1424-1425(Naylor). That recheck will take as long as the original check. Tr. 1433(Naylor). The same monitors will also check cars for radiation after the cars are decontaminated. Tr. 1550-1552(Naylor). The checks of vehicles may come after the people are checked and rechecked for contamination. Tr. 1543-1544(Naylor). There is no relief provided for the monitors in the host counties. Tr. 1425(Naylor).

Contention 19.1.

The fire leader does not have enough personnel to conduct the decontamination activities.

37. There are signed agreements with the city fire departments that will provide workers for decontamination at

the access control points. Tr. 2358(Wilcox). The agreements have not been made part of the plan, and they should be part of the plan. Tr. 2078(Carroll); Applicants' Ex. 1. p. D-2. The agreements have not been reviewed by FEMA. Tr. 2360-2361(Wilcox). Under the agreements the fire departments will provide equipment and workers that can be "mustered". Tr. 1439-1440(Naylor).

Contention 19.r.

The Coffey County Radiation Monitoring Team does not have proper radiation monitoring equipment to monitor radiation in the event of an evacuation.

38. The radiation monitoring team does not have the air sampling equipment that is needed. Tr. 1574-1575(Mannell). That equipment should be described in the plan, and it is not. FEMA II, at 122. The equipment has been ordered but it is not available at this time. Tr. 866(Mannell).

Contention 19.aa. The Coffey County Radiation Monitoring Team does not have the communication equipment it needs to keep in touch with the County Emergency Operations Center and others. The Coffey County Plan is deficient where it provides that the Radiation Monitoring Team will communicate with the County EOC by telephone. In all likelihood, there will not be enough telephone lines available so that prompt communication can be accomplished.

39. Joint radiation monitoring teams do not have portable radios that will permit the teams to talk directly with the county EOC. Tr. 1435-1436(Lewis). Presently such communications are relayed to the EOC from the plant Emergency Operations Facility. Tr. 1437(Lewis).

Contention 19.hh.

The State Plan does not assume all evacuees will be checked for contamination. The Coffey County Plan does so. The County Plan is deficient because it does not require that all evacuees go to the designated shelter area outside the evacuation zone for a contamination check. Once the evacuees are out of the area, it will not be possible to adequately notify them to go for a contamination check. It must be clear in the plans that all evacuees will be checked for contamination.

40. The public is to go to the evacuation center for contamination checks. Applicants' Ex. 1, p. 3-10. That information should be in the public information material and the EBS announcements. FEMA II, at 135; Tr. 461, 514(Mileti). It is not. Tr. 1166-1167(Wilcox).

Contention 19.kk.

The County Plan is deficient because it does not provide for disposal of contaminated equipment, vehicles, decontamination water, or any other materials that might be contaminated.

41. Certain of the materials that are contaminated will be disposed of at the plant site. Applicants' Ex. 1, p. 3-13; Tr. 1445(Mannell). The plant may not be available for that purpose because of contamination at the site. Tr. 1445(Mannell). If the plant is not available as a disposal site, the material might be disposed of at other commercial sites. Tr. 1571(Lewis). There are no agreements with such commercial sites. Tr. 1571(Lewis). Disposal of contaminated water has not been agreed to by the host counties. Tr. 1450(Naylor).

Contention 20.d.

There are no people available to provide management at the evacuation centers. Up to 9000 people would be evacuated.

One person for each 50 people evacuated will be needed. Therefore, 180 people are required.

42. The number of evacuees specified in paragraph 36 of these findings may come to each county. All of these will be registered. Applicants' Ex. 1, p. 3-11. 20-30% will need shelter and probably food. Tr. 519, 522, 523(Mileti). The number of people estimated to be needed as workers for registration in the host counties is as follows: Franklin, 11 school personnel; Lyon, 48 service club members; Anderson, 28 school personnel; and Allen, 10 school personnel. Tr. 584-595, 599-600(Fritz). These workers have not been selected. Tr. 604-606(Fritz). There are no signed agreements with the organizations that will provide the workers that indicate that the workers will be available to handle the registration. Tr. 603-604, 606(Fritz). The school personnel have been volunteered by the administrators of the school districts. Tr. 633-634(Fritz). FEMA has not verified if the workers will be available and has not analyzed if the number of workers required for registration is adequate. Tr. 2107-2108(Carroll).

43. There are no written agreements with the agencies and organizations that are to provide workers to assist in the management of the shelters in the host counties. Tr. 538, 558-560(Fritz).

Contentions 20.k. and 20.m.

20.k. There are not enough facilities for 9,000 evacuees at the shelter center. This will require sleeping, food preparation, medical, sanitation, and other facilities if the shelter needs are to be met. The County Plan does not provide details about the extent of the resources required

for food, sleeping, safety, health and sanitation, communications, recreation and religious affairs.

20.m. There has been no provision made about paying shelter owners for the use of their site or services.

44. The registration centers will be used for registration and the assignment of shelter for evacuees. Applicants' Ex. 1, p. 3-11, J-2, J-9, J-16, J-23. There are no signed agreements with schools for the use of their facilities as registration centers. Applicants' Ex. 1, p. D-2. There are no signed agreements with any organization, agency, school district, or other owner of a shelter facility that provide that the shelter can be used by evacuees. Tr. 531, 533-534, 550, 553, 555(Fritz). There are no signed agreements with any owner of a food service facility that provides that the facility can be used to provide meals for evacuees. Tr. 537, 538, 554, 556(Fritz).

Contention 25.a.

The County Plan is deficient because it does not provide for relocation of the Coffey County Emergency Operations Center in the event that it becomes necessary to evacuate it. It is unlikely that people will want to remain in the Emergency Operations Center when other offices in the Courthouse have radiation levels that are unacceptable.

45. Under certain circumstances, the EOC would not be available for use during an emergency. Tr. 1173-1175(Wilcox). The plan does not provide for an alternate EOC. The alternate site would be in Emporia at the Lyon County Sheriff's office. Tr. 1172(Wilcox). There is no written agreement with Lyon County about using its facilities as the alternate site. Tr. 1172(Wilcox).

Contentions 28.a., 28.b., 28.d., and 28.e.

28.a. The County Plan does not specifically detail how many dosimeters will be needed and what kind will be used.

28.b. There are not enough dosimeters for emergency personnel.

28.d. There is no plan specified for issuing dosimeters to County emergency workers.

28.e. The radiological Defense Officer has not developed a system for controlling radiological exposure of emergency workers.

46. Each worker will be issued a self reading dosimeter and a TLD. Tr. 1153(Wilcox); Tr. 1456(Naylor). The plan does not indicate that all the workers will receive the dosimeters. The plan should show a breakdown of workers by class that will receive dosimeters and also show the number of workers that will be in each class. Tr. 2193(Carroll). The county will issue dosimeters of each type to certain classes of workers. Tr. 1455 (Naylor); however, the classes are not listed in the plan. Tr. 2193(Carroll). The host county workers doing radiation checks and decontamination work should have dosimeters. Tr. 2195-2196(Carroll). The workers at the John Redmond Reservoir agencies (ACE, USFW, KFG) should have dosimeters. Tr. 2196(Carroll).

47. The dosimeters to be issued to workers when they start work will be prepositioned at various locations. Tr. 1500-1502(Naylor). The workers will pick up the dosimeters at a prepositioned point. Tr. 1500-1502(Naylor); Tr. 2198(Carroll). The plan itself does not list where the dosimeters will be prepositioned or where the workers in

each class will pick up their dosimeters. Tr. 2198-2199(Carroll). The dosimeters have not been prepositioned. Tr. 1501-1502(Naylor). Fire department workers and ambulance and funeral directors' personnel will pick up dosimeters when they come into the EPZ, but this is not in the plan. Tr. 1502, 1503, 1508, 1509(Naylor). There should be plans for issuing dosimeters for host county workers who will need them and for John Redmond Reservoir agencies (ACE, USFW, KFG) workers who perform duties as part of the emergency plan. Tr. 2201-2202(Leonard). The plan does not make provision for issuing the dosimeters to such host county and John Redmond agency workers.

48. Workers will periodically turn in the TLD's and be issued a replacement. Tr.1517-1518(Lewis). The replacement dosimeters will be stored at the Wolf Creek plant site. Tr. 1524(Lewis). The replacements would be brought in from the plant after the emergency started. Tr. 1523(Lewis). The storage site for the TLD's should be changed and the new site specified in the plan. Tr. 2201(Leonard). The dosimeters should be at an accessible site. Tr. 2201(Leonard).

49. The host counties and the John Redmond Reservoir agencies (ACE, USFW, KFG) do not have plans for recording dosages received by their workers who are issued dosimeters. Tr. 1536-1537(Naylor).

Contention 29.c.

The Coffey County Emergency preparedness Coordinator has not developed the training programs needed to implement the County Plan, and has not made adequate plans to familiarize Coffey County personnel with the plan and their responsibilities.

50. The course content of the joint training program, including learning objectives, lesson plans, supplemental materials, and implementing schedules, has not been developed. Applicants, at 182(Lewis).

Contention 29.g.

The County Plan should specify in detail the type and amount of training that individuals will receive. The training to be provided to the positions listed in Table 5-1 should be specified in detail.

51. Table 5-1 lists the various parts of the joint training program. Applicants' Ex. 1, p. 5-5. Each worker will receive training in one or more parts of the training program as indicated on the table. The table is to be revised to show that certain workers will receive training for more parts of the joint training program than is shown on Table 5-1. Tr. 918-919, 1276-1279(Wilcox); Tr1629-1631, 1634(Lewis). There is no plan to give training for any part of the joint training program to county commissioners, sheriffs, or emergency preparedness coordinators of the host counties. Tr. 1628(Lewis). They have specific duties under the plan. Applicants' Ex. 1, p. J-2, J-3, J-9, J-10, J-16, J-17, J-23, J-24. Table 5-1 does not reflect the training that the John Redmond Reservoir agency workers are to receive. Tr. 1635(Lewis). Applicants' Ex. 1, p. 5-5.

Contention 29.h.

The following local personnel lack sufficient training to perform their assigned function and should be trained in the identified areas:

(1) The Coffey County Emergency Preparedness Coordinator. Advice to Sheriff about protective action to take; Locating, storing, and distribution of emergency equipment; training personnel about evacuation duties and emergency equipment; have knowledge about radiation monitoring, decontamination processes, and use of protective gear; understanding duties of each person involved in the plan; conducting evacuation drills; training public about how to respond to an emergency; evacuation of people who lack transportation; implementing the guidelines to be used to determine when emergency workers should conduct activities that will result in exposures in excess of 25 REM.

(2) Coffey County Commissioners.

(3) Coffey County Clerk.

(4) Coffey County Sheriff. Coordination of evacuation process; knowledge of plan to advise people about duties and how to implement their duties; training of personnel to conduct evacuations; conduct of evacuation plan drills; notification of radiological emergency; management of roadblocks and traffic control; security of evacuated area; evacuation of persons without transportation.

(5) Coffey County Sheriff's Department personnel.

(6) Coffey County Engineer. Cleaning and maintaining of roads in bad weather; operation of roadblocks and traffic control.

(7) Coffey County Engineer's staff. Rescue function.

(8) Personnel of the Coffey County Road Department. Management and assistance at roadblocks.

(9) The Burlington City Police Department and other police departments within Coffey County. Giving of initial warnings; security of area after evacuation; traffic control, and management of roadblocks.

(10) Personnel of the City of Burlington Fire Department and the personnel of other fire departments within Coffey County. Decontamination process at roadblocks and check points; use of protective gear during the evacuation process.

(11) Traffic control personnel.

(12) Coffey County Health Officer.

(13) Volunteer team to provide medical care and first aid (to be trained by the County Health Officer).

(14) Coffey County Health Nurse.

(15) Nursing home administrators and staff.

(16) Coffey County Hospital Staff. Evacuation of patients at hospital.

(17) Coffey County Ambulance Service. Evacuation of patients at hospital and coordination of that duty with treatment of individuals injured in an emergency.

(18) Radiological Defense Officer.

(19) Coffey County Radiological Monitoring Team. Taking and evaluation of radiation levels; operation of radiological monitoring equipment; knowledge about allowable radiation dosages; use of protective gear.

(20) Personnel assisting the Radiation Monitoring Team with radiation monitoring checks.
(21) Shelter Leader.
(22) Temporary Shelter Managers.
(23) Shelter Managers.
(24) Bus drivers. About their duties and to assure that they will respond.
(25) Personnel to perform confirmation of evacuation.
(26) Volunteers and other personnel yet to be recruited who will have responsibilities under the plan.

52. The workers specified in the contention have not been trained. Applicants, at 189(Lewis). The workers who will serve on the joint radiation monitoring teams have not received the special training that they need to serve on the teams. Applicants, at 121(Naylor);Tr. 1409-1410(Lewis). 21 workers will serve on the teams or as alternates for the teams. Tr. 1538(Naylor); Applicants, at 121(Naylor). Those 21 have not been selected. Tr. 2257-2258(Leonard). The remainder of the workers who will serve as radiation monitors have not received all of their training. Tr. 1410(Lewis).

Contention 29.k.

The training program does not adequately consider how to deal with changes in personnel and in volunteers who are trained. There will be a very substantial turnover that must be dealt with.

53. Details of how the retraining program will be conducted are not in the plan. Tr. 1182-1183(Wilcox). The materials for training new people have not been prepared. Tr. 919(Mannell). All the workers who are replacements should get training comparable to the workers that were replaced. Tr. 2260-2261(Leonard).

Contention 29.q.

The state does not have adequate plans to train State personnel having emergency responsibilities. The Bureau of

Radiation Control is responsible for supporting and developing conduct of radiological emergency response training but has not established plans or courses for providing such training.

54. Table O-1, Applicants' Ex. 2, p. O-5, of the State Plan does not reflect the training that the state workers will be given. Some of the workers will receive more training than is shown for them on Table O-1. Tr. 888, 918(Mannell); Tr. 2266(Leonard).

Contention 29.s.

The following state personnel lack sufficient training to perform their assigned functions and should be trained in the identified areas:

- (1) State Department of Emergency Preparedness personnel. Training of people involved in the plan and the conduct of emergency planning drills.
- (2) Kansas Department of Health and Environment personnel. Familiarity with State and Coffey County Plans, so can meet its primary and support responsibilities as specified in the State Plan.
- (3) Kansas Bureau of Radiation Control personnel. Determining existence of offsite contamination.
- (4) Kansas National Guard Unit in Burlington, Kansas. Management of roadblocks and traffic control; evacuation of nursing homes and others; use of protective gear.
- (5) Kansas Highway Patrol personnel. Responsibilities specified in the state plan.
- (6) Kansas Department of Transportation personnel. Responsibilities specified in the State Plan.
- (7) Kansas Department of Social and Rehabilitation Services.
- (8) Kansas Fish and Game Commission personnel.

55. The state workers described in the contention are not trained to perform the functions assigned to them under the plan. Applicants, at 201(Mannell). They have not been trained in all the appropriate categories listed under Table O-1, Applicants Ex.2, p. O-5. Tr. 878-879(Mannell).

Contention 29.u.

The following federal personnel lack sufficient training to perform their assigned functions:

- (1) U.S. Army Corps of Engineers personnel

(2) U.S. Fish and Wildlife Service personnel

56. The personnel listed in the contention have not received the training under the joint training program. Applicants, at 204(Lewis). They should receive the same training as the Kansas Fish & Game Commission personnel except for some radiation survey instrumentation training. Tr. 2263, 2267(Leonard).

Contention 31.c.

The fire departments of Burlington and other cities in Coffey County do not have radio equipment which is needed to communicate with the Sheriff's office.

57. The new radio system which will be installed will give the fire departments the ability to communicate with the Sheriff's office and the EOC. Applicants, at 212(Wilcox). The departments are to give the warning to people who need special notification and are to assist with access control. Applicants' Ex. 1, p. 1-16.

Contention 31.d.

The Coffey County Road Department needs radio equipment for its vehicles to communicate with the Sheriff and others in the event of an emergency.

58. At the present time the road department vehicles do not have radio equipment that will permit them to communicate with the Sheriff and the EOC. Tr. 746(Bowers). The equipment is on order and will be installed later. Tr. 746(Bowers); Applicants, at 213(Bowers). Many of the duties that the road department workers have during an emergency will be in areas where radio will be the only adequate form of communication with the sheriff's office and the EOC. Applicants' Ex. 1, p. 1-16.

Contention 31.f.

Protection gear against radiation is needed for all workers who are involved in the evacuation plan. Three hundred fifty people will be involved in three shifts. If so, 116 sets of protective gear are required.

59. The field radiation monitoring teams will need protective clothing. Tr. 1530 (Naylor); Tr. 2286, 2292, 2296-2297 (Carroll). The only protective clothing that is available is at the plant site. Tr. 1535 (Naylor); Tr. 2363 (Lewis). The protective clothing would be needed after the accident occurred at the plant site. Tr. 1530 (Naylor). The plan does not require protective clothing for workers. Tr. 214 (Naylor).

CONCLUSIONS OF LAW

The board has considered all of the evidence submitted by the parties. Based upon a review of the entire record in the proceeding and the foregoing Findings of Fact, the Board concludes as follows:

1. With respect to the Intervenor's Contentions as specified above, the Board concludes, pursuant to 10 C.F.R. 2.760a and 10 C.F.R. 50.47, that:

(a) the emergency plans do not comply with 10 C.F.R. 50.47 and 10 C.F.R. Part 50, Appendix E and do not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency; and

(b) the issuance of the operating license would be inimical to the common defense and security and to the health and safety of the public.

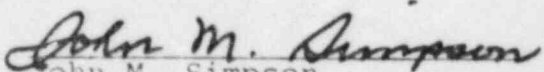
2. Therefore the Director of Nuclear Reactor Regulation should be ordered to deny the Applicants' application for a full power operating license for the Wolf Creek Generating Station, Unit No. 1.

ORDER

Wherefore, it is ordered, in accordance with 10 C.F.R. 2.760a that the Director of Nuclear Reactor Regulation shall deny the Applicants' application for a license authorizing full power operation of Wolf Creek Generating Station, Unit No. 1.

In accordance with 10 C.F.R. 2.760, 2.762, 2.785, and 2.786, this Initial Decision shall become effective and shall constitute, with respect to matters herein, the final decision of the Commission 30 days after issuance hereof, subject to any review pursuant to the above cited Rules of Practice. A Notice of Appeal of this decision may be filed within 10 days after service hereof. An appellant's brief shall be filed within 30 days after the filing of the Notice of Appeal, or 40 days in the case of the Staff. Within 30 days after service of the brief of the appellant, or 40 days in the case of the Staff, any other party may file a brief in support of, or in opposition to the appeal.

Respectfully Submitted,
Simpson & Johnson


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Dated: March 30, 1984

DOCKETED
USNRC

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

'84 APR -2 A11:01

Before the Atomic Safety and Licensing Board

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of

KANSAS GAS AND ELECTRIC COMPANY, et al.

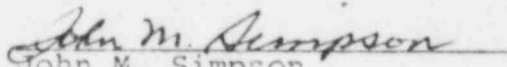
(Wolf Creek Generating Station,
Unit No. 1)

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Docket No. STN 50-482

CERTIFICATE OF SERVICE

This is to certify that copies of the foregoing "Intervenors' Proposed Findings of Fact, Conclusions of Law, and Brief in the Form of a Proposed Initial Decision" were served as follows: by Express Mail (U.S. Postal Service) to Myron Karman and Brian P. Cassidy, and by deposit in the United States Mail, first class, postage prepaid, to all others on the attached Service List. Such service was made on March 30, 1984.


John M. Simpson

DATED: March 30, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)
)
KANSAS GAS AND ELECTRIC COMPANY, et al.) Docket No. STN 50-482
)
(Wolf Creek Generating Station,)
Unit No. 1))

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