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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.)
)
(Wolf Creek Generating Station,)
Unit No. 1))

Docket No. STN 50-482

APPLICANTS' REPLY TO THE
PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND BRIEFS
FILED BY INTERVENORS AND NRC STAFF/FEMA

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I. INTRODUCTION

In accordance with the Licensing Board's instructions to the parties at Tr. 2369-70, Kansas Gas and Electric Company ("KG&E"), Kansas City Power & Light Company and Kansas Electric Power Cooperative, Inc. ("Applicants") herein submit their reply to the proposed findings of fact, conclusions of law, and briefs filed by Intervenor and the NRC Staff and FEMA on March 30, 1984 and April 9, 1984, respectively. While Applicants believe that their initial brief and proposed findings fairly and accurately reflect the record in this proceeding, Applicants

are largely in agreement with the NRC Staff/FEMA brief and proposed findings. Accordingly, Applicants' reply focuses on the brief and proposed findings submitted by Intervenor.

Applicants have not attempted to respond to each specific point with which Applicants disagree. Nor is the Board required to address expressly each and every individual finding proposed by each party. See Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-422, 6 N.R.C. 33, 41 (1977), and cases cited therein. Where the disagreements are plain, and the positions are accompanied by accurate citations to the record, for example, Applicants have not restated their position, but rely upon "Applicants' Proposed Findings Of Fact, Conclusions Of Law, And Brief In The Form Of A Proposed Initial Decision" (March 20, 1984).

Applicants' reply is set forth in two sections which follow this Introduction. The first section is a memorandum in reply to the proposed findings and briefs submitted by the other parties. The next section, Part III, replies to the specific proposed findings of fact filed by other parties. Proposed findings of fact are cited as "[proposing party] PF [paragraph number]" -- for example, "Staff/FEMA PF 22" or "IPF 12." References to Intervenor's brief are cited as "Intervenor's Opinion, at [page number]."

II. APPLICANTS' MEMORANDUM IN REPLY
TO PROPOSED FINDINGS, CONCLUSIONS,
AND BRIEFS OF OTHER PARTIES

Applicants' review of Intervenor's brief and proposed findings has revealed some material defects in the proposed findings which are of a generic nature. These defects are discussed briefly below.

A. INTERVENORS DEFAULTED ON THEIR OBLIGATION
TO FILE PROPOSED FINDINGS AS TO THE VAST
MAJORITY OF THEIR CONTENTIONS

Section 2.754(a) of the Commission's Rules of Practice provides, in relevant part:

Any party to a proceeding may, or if
directed by the presiding officer shall,
file proposed findings of fact and conclusions of law * * *.

10 C.F.R. § 2.754(a) (emphasis added). Section 2.754(b) further provides:

Failure to file proposed findings of fact, conclusions of law or briefs when directed to do so may be deemed a default, and an order or initial decision may be entered accordingly.

10 C.F.R. § 2.754(b) (emphasis added).

At the commencement of the evidentiary hearings in this proceeding, and again at the close of the record, the Licensing Board specifically directed all parties to file proposed findings of fact and conclusions of law, briefs, and a proposed form of order. See Tr. 150, 2369-70 (Wolfe). Indeed, the

Board expressly cautioned that, upon any party's failure to submit proposed findings, conclusions of law, and briefs, "they will be deemed in default in this case." Tr. 150 (Wolfe) (emphasis supplied).

Intervenors concurred in the filing dates established by the Licensing Board, Tr. 2366 (Simpson), and sought no extension of time. Nevertheless, Intervenors' brief and proposed findings do not even mention 161 of the 216 contentions, all of which were the subject of testimony by Applicants and the NRC Staff/FEMA. Thus, Intervenors have, with no explanation whatsoever, completely abandoned approximately 75% of their contentions in this proceeding. Accordingly, to the extent Intervenors have failed to file proposed findings, they are in default under the Commission's Rules of Practice.^{1/} Indeed,

^{1/} Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Unit No. 2), ALAB-280, 2 N.R.C. 3, 4 n.2 (1975) (where directed to file proposed findings, failure to file with respect to some issues constitutes default as to those issues); Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, 17 N.R.C. 346, 371-72 (1983) (where intervenor files proposed findings, board entitled to take that filing as setting forth all still-contested issues); Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), LBP-83-27, 17 N.R.C. 949, 954 (1983) (where intervenor who has been directed to submit proposed findings files only as to some issues, balance of issues is deemed abandoned); Texas Utilities Generating Co. (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-83-43, 18 N.R.C. 122, 130 (1983) (where filing of proposed findings is mandated, failure to file as to some allegations constitutes abandonment of that portion of case). See generally, Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-709, 17 N.R.C. 17, 23-24 (1983).

Intervenors themselves concede that "[t]he matters examined during the evidentiary hearing which are not discussed in [Intervenors' proposed] Opinion were considered by the Board and found either to be without merit or not to affect the Board's decision herein." Intervenors' Opinion at 60.

Intervenors' Contentions 1(a), 1(c), 1(d), 1(f), 1(g), 1(j), 1(k), 1(l), 4(a), 5(a), 5(b), 6(b), 6(c), 6(d), 6(e), 6(f), 6(h), 6(n), 6(o), 6(p), 6(q), 6(r), 7(a), 7(c), 7(d), 8(a), 8(b), 9(a), 10(a), 10(b), 10(c), 10(d), 11(b), 11(c), 11(d), 11(f), 11(g), 11(h), 11(i), 11(k), 12(b), 12(c), 12(d), 12(f), 12(g), 12(l), 12(n), 12(o), 12(p), 12(r), 12(t), 13(a), 14(c), 14(d), 15(e), 15(g), 15(h), 15(i), 15(k), 15(l), 16(b), 16(d), 16(e), 16(h), 16(i), 17(a), 17(b), 17(c), 17(d), 17(e), 17(f), 18(c), 18(d), 18(e), 18(k), 18(l), 18(m), 18(p), 18(q), 18(s), 18(t), 18(u), 18(v), 18(w), 18(y), 19(d), 19(f), 19(g), 19(j), 19(m), 19(o), 19(p), 19(q), 19(s), 19(t), 19(w), 19(x), 19(y), 19(z), 19(cc), 19(dd), 19(jj), 19(ll), 20(b), 20(c), 20(e), 20(g), 20(i), 20(j), 20(l), 20(o), 21(b), 21(c), 22(a), 23(a), 24(a), 24(b), 24(c), 24(d), 25(b), 26(a), 27(a), 28(c), 28(f), 29(a), 29(b), 29(d), 29(e), 29(f), 29(i), 29(j), 29(l), 29(m), 29(n), 29(o), 29(p), 29(r), 29(t), 30(a), 30(b), 30(c), 30(d), 31(a), 31(b), 31(h), 31(i), 31(j), 31(k), 31(l), 31(m), 31(n), 31(o), 31(p), 31(q), 31(r), 31(s), 31(t), 31(u), 31(v), 32(a), and 32(b) should therefore be dismissed in their entirety.^{2/}

^{2/} In addition, Intervenors purport to address Contention 29(h), which alleges -- in subsections (h)(1) through (h)(26)

The Board need not address the abandoned contentions. Indeed, even as to the contentions which Intervenor have briefed and filed proposed findings, their submittal often addresses only limited aspects of the contentions. In such instances, the Board need address only those limited issues which Intervenor's' proposed findings indicate are still contested. See Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, supra at 371-72.

B. INTERVENORS GENERALLY DISREGARDED THE
LICENSING BOARD'S INSTRUCTION TO NOTE ANY
AGREEMENTS WITH APPLICANTS' PROPOSED FINDINGS

In instructing the parties on the preparation of proposed findings of fact and conclusions of law, and post-hearing memoranda, the Licensing Board directed that the parties filing after Applicants "should, wherever possible, incorporate by reference Applicants' proposed findings with which they do not

(Continued)

-- the need for training of specified emergency workers. However, despite extensive testimony on the training to be received by each group of workers, Intervenor merely assert generally that the workers have not yet completed training. Intervenor's' discussion of the training of specific workers is limited to the county members and alternates for the Joint Radiation Monitoring Teams -- a subpart of Contention 29(h)(19). And as to those emergency workers, Intervenor merely state that they have not yet received their training. See IPF 52. Accordingly, based on Intervenor's' default, the Board should also dismiss Contentions 29(h)(1) through (h)(18), and 29(h)(20) through (h)(26), as well as the aspects of 29(h)(19) which Intervenor failed to brief.

really disagree." Tr. 2370 (Wolfe). The NRC Staff and FEMA embraced the Board's recommendation. However, Intervenor's have largely ignored the Licensing Board's instruction in their filing, and have drafted their proposed findings essentially in a vacuum^{3/} (apparently conceding the accuracy of all of Applicants' proposed findings which their proposed findings do not directly controvert). Intervenor's disregard of the Licensing Board's instructions has significantly increased the burden on the Board and the other parties in the preparation and review of proposed findings in this proceeding.

C. INTERVENORS' PROPOSED FINDINGS FAIL TO ADHERE TO FORMAT PRESCRIBED BY COMMISSION REGULATION

The Commission's Rules of Practice, at 10 C.F.R. § 2.754(c), provide that proposed findings of fact shall be confined to the material issues of fact presented on the record, with exact citations to the transcript of record and exhibits in support of each proposed finding. Consequently, the Board must reject proposed findings which do not conform to 10 C.F.R. § 2.754(c), except where a party is summarizing, or drawing a logical inference from, other findings which are supported by exact citations to the record.

^{3/} In their sole reference to Applicants' extensive filing, Intervenor's adopt paragraphs 1 through 8 of Applicants' proposed findings. See IPF 1. Those paragraphs are introductory findings, limited to a brief summary of the procedural history, and the issues in controversy in this proceeding. Intervenor's did not advert to Applicants' proposed findings on the merits of Intervenor's contentions.

While Applicants have not addressed each record citation offered by Intervenor, Applicants have found that many, if not most of the citations, are inaccurate. This includes cases where the cited testimony does not support the position urged in the finding,^{4/} as well as cases where the cited testimony is taken out of context.^{5/} In other cases, Intervenor have provided inaccurate citations to statements which actually appear elsewhere in the record.^{6/} In still other cases, Intervenor have attempted to bolster their position with arguments based on factual assertions which are not supported by evidence of record.^{7/} Applicants' difficulties in reviewing Intervenor's

^{4/} For example, IPF 13 states that "there is not a secondary means of notification [of the U.S. Fish and Wildlife Service]. Tr. 1150 (Wilcox)." In fact, at Tr. 1150, Mr. Wilcox states that USEWS (as well as the other Redmond agencies) can be reached "only from the Sheriff's Office at the moment; but they will be in contact with the EOC when our new radios get here."

^{5/} For example, IPF 12 states that "the routes that will be [in the USEWS area] 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)." In fact, Mr. Wingo stated that "I am satisfied that the 45 minutes can be achieved. However, we will require a computational method based on the procedures to confirm that 45 minutes." Tr. 309.

^{6/} For example, IPF 13 states that "The center of the reservoir can be used by people. Tr. 1247 (Wilcox)." Nothing on Tr. 1247 relates to use of the Reservoir, although Intervenor might have cited Tr. 2162 for the statement, where Mr. Swing stated that "Very little activity occurs in the center of the lake simply because it is so shallow with submerged hazards."

^{7/} For example, Intervenor's Opinion at 19 states that information on the schools to which school children will be evacu-

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citations to the record have been exacerbated by Intervenor's inclusion in their memorandum of arguments and factual assertions (only sometimes supported by references to the record) which are not reflected in their proposed findings.^{8/}

In Part III of this document, wherein Applicants reply to the specific proposed findings of fact filed by other parties, Applicants have noted some of the significant inaccuracies in record citations. Applicants' failure to catalogue all inaccuracies in Intervenor's record citations should not be construed as an indication that those citations not specifically challenged are accurate. To the contrary, where the findings proposed by Intervenor are inconsistent with those proposed by Applicants, the NRC Staff and FEMA, Applicants believe that a significant contributing factor to the difference is the liberties Intervenor has taken with the record.

(Continued)

ated "will not be in the brochure." Yet Applicants' direct testimony clearly says that "The brochure to be distributed annually to area residents will advise parents of the host county facility to which their school children will be evacuated in an emergency." Applicants, at 66.

8/ For example, Intervenor's Opinion at 11 states, "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." Nothing in the record supports this statement. Even IPF 9 states only that "It will be necessary for the EBS announcements to deal with wind direction if that is significant. Tr. 1714 (Stern)." And, the record cited does not even support that more limited statement. At Tr. 1714, Mr. Stern only stated that EBS announcements would be used if it were necessary to change evacuation routes.

D. INTERVENORS MISAPPREHEND THE PREDICTIVE NATURE
OF NRC'S EMERGENCY PLAN REVIEW IN AN OPERATING
LICENSING PROCEEDING

Many of the Intervenor's arguments put forth in their Opinion and Proposed Findings reflect a fundamental misunderstanding of the Licensing Board's responsibilities in resolving emergency planning contentions in an operating license proceeding. Intervenor's assert that Applicants' operating license application should be denied, Intervenor's Opinion at 61, 90-91, relying in large part on the fact the actions committed to and in progress have not yet been completed. This approach is inconsistent with NRC regulations and case law and should be rejected.

A few examples will illustrate Intervenor's approach. Contention 1(e) alleges that the County Plan does not make adequate provision for notifying the three agencies at John Redmond Reservoir. Intervenor's primary attack is that the tone alert radios to be provided to each of the agencies have not yet been installed. Intervenor's Opinion at 5-6; IPF 5. They persist in this argument notwithstanding the uncontroverted testimony that the tone alert radios are scheduled for delivery in Spring 1984, with installation in early Summer 1984. Tr. 938-40, 942, 1150 (Wilcox). As another example, Contention 2(c) claims that there will not be enough telephone lines in an emergency. Intervenor's limit their proposed findings to a complaint that two telephone lines are needed for

people to call for transportation assistance and only one is available. Intervenor's Opinion, at 8; IPF 5. Here, too, Intervenor's ignore the uncontradicted testimony that there will be two telephone lines. Tr. 759 (Bowers); Tr. 1285-86 (Wilcox).^{9/} Also throughout Intervenor's Opinion and Proposed Findings are arguments based on changes to the County Plan and procedures which the County has committed to make, but which have not yet been incorporated into those documents.^{10/}

These arguments seem to be based on Intervenor's apparent belief that an emergency planning hearing must deal with the status of emergency planning as of the time of the hearing. The fact that implementation of the plan is in progress is

^{9/} See also, Contentions 3(a) (radio equipment not yet installed); 11(a) (tone alerts not installed); 12(e) (signs not developed); 15(n)-(o) (transportation assistance list not complete); 16(a) (phone lines not yet installed); 19(e) (Radiological Defense Officer not yet fully trained); 19(i)-(j) (radiation monitoring team not yet selected); 19(k) (host county radiation monitors not yet selected or trained); 19(r) (air sampling equipment on order); 20(d) (host county shelter personnel not yet selected or trained); 28(b)-(e) (dosimeters not yet prepositioned); 29(c) (detailed training materials not yet completed); 29(h) (emergency workers not yet trained); 29(k) (detailed training materials not yet prepared); 29(s) (state workers not yet trained); 29(u) (USACE, USFWS not yet trained); 31(c)-(d) (radio system not yet installed); 31(f) (protective clothing not yet prepositioned).

^{10/} For example, in its arguments on Contention 28(b)-(e), Intervenor's complain that the County Plan does not state where dosimeters will be prepositioned. Intervenor's Opinion at 49, IPF 47. The uncontradicted testimony however states that County procedures will provide for prepositioning of dosimetry and where that prepositioning will be. Applicants PF 281.

apparently of no moment. Nor do Intervenorors acknowledge their ability to challenge the underlying substantive emergency planning questions notwithstanding the ongoing status of implementation.

Intervenorors misunderstand the ground rules for emergency planning. These start with 10 C.F.R. § 50.47(a)(1), which sets forth the finding on emergency planning which the Commission must make before it can issue an operating license. The finding is a predictive one -- "that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency." Since a "radiological emergency" cannot possibly occur until after the operating license is issued, the finding can only be interpreted to address the predicted state of emergency preparedness at (and after) the issuance of the full power operating license.

Another ground rule established by the Commission is that the most recent versions of the offsite emergency plans are not the only basis on which emergency planning decisions can be made. While a major source of information on the adequacy of emergency preparedness, they are not intended to be the sole source of information. This is clear from 10 C.F.R. § 50.47(a)(2).

A FEMA finding will primarily be based on a review of the plans. Any other information already available to FEMA may be considered in assessing whether there is reasonable assurance that the plans can be implemented.

Thus FEMA in its findings, and the Licensing Board in evaluating the record, is entitled to use the best, most recent information in ascertaining whether there is reasonable assurance on the state of emergency planning, even if that information has not yet been incorporated in the emergency plans themselves.

The Appeal Board and licensing boards have recognized both of these principles. In Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 N.R.C. 1076 (1983), the Appeal Board rejected intervenors' claim that the licensing board's reliance on "predictive" findings and "post-hearing verification" had denied them their right to a hearing on matters such as installation of communications systems, installation and testing of the siren system, and implementation procedures. The Appeal Board pointed to the Commission's explicit recognition that "the findings on emergency planning required prior to license issuance are predictive in nature." 17 N.R.C. at 1103, quoting 47 Fed. Reg. 30232, 30235 (1982).

Since the findings are predictive in nature, many of the issues singled out by Intervenor (such as installation of equipment and the like) are appropriately left for confirmation outside of the hearing process. As the licensing board in San Onofre observed:

[W]e are also leaving for Staff confirmation whether certain emergency equipment has been purchased and delivered to the offsite response organizations. To be sure, such equipment can be very important in a real emergency. On the other hand, delivery of emergency equipment is not a subject on which further hearing and cross-examination is likely to be productive, because the details about it are unimportant. For our purposes, a four-wheel drive vehicle is four-wheel drive vehicle, whether it is a Ford or a Chevrolet. What matters to us at this point is a Staff confirmation that equipment suitable for its emergency purpose has been delivered.

Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-82-39, 15 N.R.C. 1163, 1216 (1982).

Because of the predictive nature of the findings, the plans themselves need not be "final." The Appeal Board has repeatedly held that hearings at the operating license stage can be held whether or not the plans are complete, so long as the plans are sufficiently developed to support the reasonable assurance finding. Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, supra at 380; Cincinnati Gas & Electric Co. (Wm. H. Zimmer Nuclear Power Station, Unit No. 1), ALAB-727, 17 N.R.C. 760, 775 (1983); Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-730, 17 N.R.C. 1057, 1066 (1983); Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-732, supra at 1104. Thus, it is clearly appropriate for testimony to reflect changes that will be incorporated in the emergency plans.

And it is also clearly appropriate that the Licensing Board reflect the most current information in judging the adequacy of those aspects of the County and State plans challenged by Intervenorors.

III. APPLICANTS' REPLY FINDINGS

ISSUE 1: Initial Notification and Official Communications

1. Contention 1(e). Intervenorors challenge the adequacy of provisions for the notification of the John Redmond Reservoir agencies, asserting that tone alerts have not been installed at the agencies' headquarters, and that the headquarters are not staffed 24 hours per day. Intervenorors Opinion, at 5-6; IPF 2. Initial contact with the agencies' headquarters would be by telephone (backed by radio). Tr. 939, 1149-50 (Wilcox). In addition, each agency is being provided with a commercial grade tone alert receiver. Applicants Ex. 1, § 3.2; Tr. 939, 1149 (Wilcox). While the tone alerts were not yet installed at the time of the evidentiary hearings, they are scheduled for delivery in Spring 1984, and for installation in early Summer 1984. Tr. 938-40, 942, 1150 (Wilcox). Moreover, contrary to Intervenorors' assertions (Intervenorors Opinion, at 6), provisions have been made for round-the-clock notification of the agencies. The County has the home telephone numbers for a primary contact and an alternate for each of the three agencies. Tr. 940, 1150 (Wilcox).

2. Contention 1(i). Intervenors criticize the County Plan because it does not expressly provide for the notification of an alternate to the fire chief where a fire chief is unavailable at the time of an emergency. Intervenors Opinion, at 6-7; IPF 3. In an attempt to support their position, Intervenors grossly distort the FEMA testimony that it is unnecessary to specify alternates to the fire chiefs in the plan, if alternates are established in (non-radiological) standard procedures. Compare IPF 3 with Tr. 1744-46, 1750-51 (Leonard), and FEMA-II, at 9. Indeed, the County Plan itself recognizes the existence of assistant fire chiefs. See Applicants Ex. 1, § 1.2.6. In any event, the "fire phone" system used by the County obviates Intervenors' concern. In the event of an emergency at Wolf Creek, the Fire Leader would call the "fire number" for each fire department, which would automatically ring the fire phones of fire chiefs and alternates (as well as other firemen). Applicants PF 16.

ISSUE 2: Coffey County Courthouse and EOC Communications

3. Contention 2(b). Intervenors complain that no one in the EOC is assigned responsibility for answering the telephones, noting that "key people" in the response organization will be taking calls. Intervenors Opinion, at 7-8; IPF 4. Their arguments reflect a fundamental misapprehension of the nature of the calls which would come into the EOC. A high volume of calls is not expected, since most of the phones in the

EOC will have unlisted numbers, so that usage would be restricted to emergency response functions. And much of the contact with emergency workers would be via two-way radio. Applicants PF 20-21. Under these circumstances, the addition of a dispatcher to the EOC staff is unnecessary.

4. Contention 2(c). Intervenor's assert that a single telephone line to the County Engineer's Office will be insufficient to handle calls from the public requesting transportation assistance in an evacuation. Intervenor's maintain that a total of two lines will be needed. Intervenor's Opinion, at 8; IPF 5. But, contrary to Intervenor's assertion, calls from the public requesting transportation assistance go to the County Shop, not the Engineer's Office. See Applicants PF 156, 158. And, the County Shop will have two telephone lines, which will ring from a single telephone number to be publicized for the public to call for emergency transportation. Tr. 759 (Bowers); Tr. 1145, 1285-86 (Wilcox).

ISSUE 3: Sheriff's Communications Equipment

5. Contention 3(a). Intervenor's characterize the plan as "deficient" because the County's new radio equipment, which will permit the Sheriff to communicate with the plant and throughout the County, was not installed at the time of the hearing. Intervenor's maintain that the operating license should not be issued until the new equipment is in place. Intervenor's Opinion, at 8-9; IPF 6. But the equipment is

scheduled to be in place in Spring 1984, well before plant construction will be completed. Tr. 644, 646 (Freeman).

ISSUE 6: Emergency Response Command/Control

6. Contention 6(g). Intervenors' contention alleged simply that two persons -- not one -- would be necessary to direct the evacuation. But the uncontroverted testimony indicates that only one individual -- the Sheriff -- is needed for this function. See Applicants PF 29. An evacuation of the plume EPZ can be accomplished within 2-1/2 hours, and the Sheriff has, in prior emergencies, worked three to four days without relief. Applicants Ex. 1, § 3.3; Tr. 650 (Freeman). Applicants PF 29. Intervenors seem to suggest that the Undersheriff would have regular emergency duties which might conflict with his role as the Sheriff's alternate. Intervenors Opinion, at 9-10; IPF 7. This is plainly not the case. If the Sheriff is available in an emergency, the Undersheriff will perform the same functions as the other deputies. Should the Sheriff be unavailable for any reason, the Undersheriff's sole function would be to assume the Sheriff's responsibility for directing the evacuation. Tr. 647-50 (Freeman).

ISSUE 8: Evacuation Time Estimate

7. Contention 8(c). Intervenors acknowledge that the testimony of Applicants' witness corrected a footnote in the County Plan concerning the evacuation time estimate for those needing transportation assistance. Intervenors now demand that

the operating license not be issued until the footnote is corrected. Considering the obligation of the Emergency Planning Coordinator to review the plan at least annually and certify that it is current, Applicants Ex. 1, § 5.3, Intervenor's proposed remedy makes little sense. (Since the current version of the County Plan is dated September 1983, it must be revised by September 1984.)

ISSUE 9: Evacuation Routes

8. Contention 9(c). Intervenor maintains that 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." Intervenor's Opinion, at 10-11; IPF 9. Intervenor mischaracterizes the record by stating that FEMA and Applicants' witnesses "acknowledge . . . that the wind direction will have an effect on the evacuation routes."^{11/} Intervenor's Opinion at 11 (emphasis added). But, pre-emergency designation of evacuation routes facilitates public response during an accident. And, it is FEMA's experience that emergency plans generally pre-designate evacuation routes for given sectors of an EPZ, and do not contemplate determination of routes (from among a pre-identified pool of routes) based on wind direction at the time of

^{11/} At best, the citations provided in IPF 9 stand for the proposition that wind direction might affect evacuation routes. Tr. 1714 (Stern); 1840-45 (Carroll, Leonard).

evacuation. See Applicants PF 63. Moreover, the uncontroverted testimony of record indicates that the evacuation routes here were selected considering wind direction. See Applicants PF 64. In any event, if it were deemed necessary, alternate evacuation routes could be readily identified at the time of an emergency, and broadcast to the public via the EBS announcements. See Applicants PF 65-67. Because it would be impractical to attempt to anticipate all such possible contingencies, and because the EBS announcements could be readily modified on an ad hoc basis, it is unnecessary to draft in advance, EBS announcements which account for alternate evacuation routes. Tr. 1843-44 (Leonard).

9. Contention 9(e). Intervenors argue that the County Plan must deal with the situation where alternate evacuation routes must be selected because of heavy snow, rain, flooding or fog. Yet Intervenors point to no evidence that alternate evacuation routes would be necessary as a result of these weather conditions. And the uncontradicted evidence demonstrates that that planning for alternate evacuation routes is not necessary. Applicants PF 66-67.

ISSUE 11: Public Alert and Notification System

10. Contention 11(a). Intervenors express concern that the County Plan does not reflect details of the provisions for notification of the public at Redmond Reservoir, especially for that portion of the Reservoir not covered by sirens.

Intervenors allege that FEMA is uncertain whether that area can be warned within 45 minutes, and indicate that the tone alert radio is not installed at the headquarters of the U.S. Fish and Wildlife Service ("USFWS"). Finally, Intervenors express concern that people in the middle of the Reservoir may be unable to hear the sirens. Intervenors Opinion, at 12-14; IPF 11-13.

11. Intervenors do not dispute that -- with the exception of a small portion of land to the extreme west of the recreation area, under the jurisdiction of the USFWS -- all areas of Redmond Reservoir within the plume EPZ under the jurisdiction of the three agencies are covered by sirens. See Applicants PF 170, 174. Thus, if there were a person in a boat in the middle of the Reservoir, he would be able to hear sirens. Tr. 2144 (Swing). It is only if there were a boat in the middle of the Reservoir and if the boat motor were running that someone in a boat in the middle of the Reservoir might not hear the sirens. Tr. 2144-45 (Swing).

12. The record does not support Intervenors' claim that motor boaters will be using the middle of John Redmond Reservoir.^{12/} The area in question is known as the "Mud Flats" and is not used by boaters. Because it is shallow, has submerged

^{12/} Although IPF 13 cites Tr. 1247 (Wilcox) for the proposition that "[t]he center of the reservoir can be used by people," that reference says nothing at all about use of the Reservoir.

hazards, and has a loose silt bottom, boats trying to get into the area will simply get stuck. Tr. 1296-97, 1300 (Wilcox); Tr. 1381 (Scott); Tr. 2162 (Swing).

13. Even if there were a person in a boat in the middle of the Reservoir, with the boat motor running, who might not hear the sirens, the siren coverage of the water areas is adequate. Given the characteristics of the center of the Reservoir, it is unlikely that if there are any boats in that area, they would have their motors running for any length of time. Tr. 2166 (Swing). Assuming that someone might try to take a motor boat to the center of the Reservoir, he is unlikely either to motor around within that small area for any lengthy period of time, or to simply sit in the middle of the Reservoir with the boat motor running. In addition, the sirens would be sounded in an emergency for a minimum of 3 to 5 minutes. Applicants Ex. 1, § 3.2. Thus, anyone moving into or out of the center of the Reservoir with his boat's motor running, can be expected to be -- at some point during the sounding of the sirens -- within siren range, and able to hear the siren even over the boat's motor. And, as noted above, even anyone moving into the center of the Reservoir would be able to hear the sirens as soon as the boat's motor was turned off. Accordingly, given the characteristics of the center of the Reservoir and the minimum duration of the siren signal, the individual in the boat in the middle of the Reservoir with his boat's motor

running (see IPF 13), is nothing more than a hypothetical notification concern.

14. Pursuant to USEWS' emergency procedure, warning within the small area of land not covered by fixed sirens will be accomplished by agency personnel from agency vehicles using sirens and personal contact.^{13/} Applicants PF 170, 174. The uncontroverted evidence of record indicates that this can be accomplished within 45 minutes. Applicants PF 174. Such a time would be unacceptable only if tone alerts were the primary means for notifying the Redmond agencies. If the agencies are notified by some direct method, an estimate of 45 minutes for public notification by the agency is acceptable. Tr. 298 (Wingo). FEMA now understands that telephone will be the primary means of notification for the Redmond agencies, with the tone alert radios as a back-up. Tr. 374-75 (Carroll). With this understanding, USEWS' 45-minute estimate is acceptable. Tr. 377 (Wingo). The tone alert radios are scheduled for delivery in Spring 1984, and for installation in early Summer 1984. Tr. 938-40, 942 (Wilcox).

15. Thus, contrary to Intervenor's assertions (see IPF 12), FEMA is at this stage (for purposes of system design) satisfied that the notification can be achieved within the

^{13/} There is only one road that services this USEWS area. Tr. 2161 (Swing).

required period. Once the entire alert and notification system is installed and operational, FEMA will require further data to confirm USEWS' 45-minute estimate. Tr. 309 (Wingo).

16. The USEWS Evacuation Procedure included in the County Plan generally reflects the agency's responsibilities for public notification. See Applicant Ex. 1, at I-2 to I-4. Intervenor's distort the record to support their assertion that FEMA would require further detail to be included in the County Plan. See IPF 12, citing Tr. 365 (Wingo). In fact, the FEMA witness unequivocally explained that FEMA was outlining the information to be included in the final alert and notification system report to be submitted by Applicants to FEMA after the entire alert and notification system is operational. Tr. 306-07, 364-67 (Wingo). Indeed, the FEMA witness expressly noted that much of the information for the final alert and notification system report need not be included in the County Plan, but rather could be information such as references to existing USEWS standard operating procedures for public notification of hazardous weather conditions. Tr. 366 (Wingo). Intervenor's arguments that the County Plan must be revised to include extensive additional detail about the provisions for notification of the public at Redmond Reservoir are thus baseless.

17. Noting that farmers working in their fields may not receive direct notification (via tone alert radios or siren), Intervenor's assert that the EBS announcements should instruct

"farm families" to warn farmers in the fields of the need to evacuate. Intervenor's Opinion, at 14-15; IPF 14. But the County already plans to include just such a reminder to the community in the EBS announcements, to capitalize on the informal notification processes that naturally operate in an emergency. See Applicants PF 97-98. Intervenor's further suggest that some other method (e.g., route alerting) be employed to provide direct notification to persons such as farmers in fields.^{14/} IPF 14. Although Intervenor's claim that FEMA has recognized that in some areas there are routes developed to warn farmers in the field, IPF 14,^{15/} the FEMA expert witness in fact stated unequivocally that he knew of no emergency plan that used route alerting to provide notification to individuals in outlying areas who had been furnished with tone alert radios. Tr. 345 (Wingo); see Applicants PF 100. Indeed, NUREG-0654 is satisfied even where an alert and notification system is comprised entirely of tone alerts placed in every house. Tr. 325-26 (Wingo).

^{14/} Intervenor's erroneously state that NUREG-0654 "requires" coverage within 45 minutes of 100% of the population not receiving initial notification. Intervenor's Opinion, at 14. The NUREG-0654 "requirements" in this respect are in fact design objectives and not guarantees. Applicants PF 75.

^{15/} IPF 14 cites Tr. 325 (Wingo) as the basis for this statement. However, Mr. Wingo's testimony at that page states that some emergency plans use route alerting where there are people who are "remotely located" and do not have tone alert radios.

18. Intervenors also criticize provisions for special notification to the hearing-impaired, noting that the County has not yet identified all who may need special notification in an emergency. Intervenors Opinion, at 15-16; IPF 15. But the list of hearing-impaired individuals is already being developed. Applicants PF 78, 85-86, 93.^{16/} Intervenors attempt to downplay the County's extensive program for the preparation of this list, which includes the County Survey, as well as a "Special Needs Card" (distributed annually with the brochure), and contacts with, inter alia, the County Health Nurse and family members. Compare IPF 15 with Applicants PF 78, 93. See also Applicants PF 154-55. Intervenors have elicited no evidence to indicate that the County program for the identification of the hearing-impaired is insufficient and have provided neither citation nor support to justify the impractical annual personal interview of all households in the EPZ that Intervenors urge the Board to require. See Intervenors Opinion, at 16. And, contrary to Intervenors' assertions (Intervenors Opinion at 15; IPF 15), the County Plan does provide adequate detail about provisions for special notification of the hearing-impaired. See Applicants Ex. 1, §§ 1.2.3 (item 4),

^{16/} IPF 15 incorrectly states that "at the present time the County is not able to identify where the individuals are located who will need special warning." Based on the County Survey, 25 people with hearing problems significant enough to require special notification have been identified. Tr. 978-79.

1.2.5 (items 1 and 6), 1.2.6 (item 1), 1.2.7 (County Health Nurse, item 1), 3.2, 5.4; Applicants Ex. 1, at H-8.

19. Intervenors point to no evidence whatsoever to support their suggestion that the County may be unable to make the special notifications within the required time. Intervenors Opinion, at 15-16; IPF 15. Indeed, all the evidence of record (the number of households estimated to need special notification, the number of personnel available to perform the function, and the County Engineer's testimony on the time to make the special notifications) confirms the feasibility of meeting the requirement. See Applicants PF 86.

20. Finally, Intervenors complain that the County Plan does not include letters of agreement with the County fire departments for the provision of special notification in LeRoy and Burlington. Intervenors Opinion, at 16; IPF 16. Yet there is no dispute that letters of agreement have been signed with all five County fire departments -- Lebo, Waverly, LeRoy, Gridley and Burlington. Tr. 2359 (Wilcox). And the County Plan indicates on its face that these letters of agreement will be included in the plan. See Applicants Ex. 1, at D-2.

21. Contention 11(e). Intervenors allege a lack of planning for notification in the event a siren fails to operate, and particularly allege that there is no staff assigned to provide notification under such circumstances. Intervenors Opinion, at 16-17; IPF 17. Because of their frequent testing and

use, siren failure in an emergency is unlikely. Applicants PF 82. But, should a siren fail to operate in an emergency, the County plans to dispatch fire department vehicles (not mentioned by Intervenor) as well as Sheriff's patrol cars to provide notification to the residents of the affected area. Compare IPF 17 with Applicants PF 84. Such provisions can be made on an ad hoc basis. There is no requirement that this contingency be addressed in the plan. Tr. 345-47 (Wingo). Thus, there is no basis either in NUREG-0654 or elsewhere for the imposition of the requirement that Intervenor urge. See Intervenor Opinion, at 17. Moreover, given the extremely low probability of siren failure in an emergency, Applicants PF 82-83, it would be impractical to attempt to more specifically "assign" personnel to make such notification, since it is impossible to anticipate the size of the area that might need notification, or the circumstances under which the notification would have to be provided.

22. Contention 11(j). Intervenor asserts that the County Plan includes no provisions for the testing and maintenance of tone alert radios, and that the tone alert program does not comply with FEMA-43. Intervenor Opinion, at 18; IPF 18. However, contrary to Intervenor's assertions, the County plan does reflect the standard weekly testing of tone alerts by EBS. In addition, the plan indicates that a current listing of residences needing tone alerts is maintained by the Emergency

Preparedness Coordinator, and is updated at least monthly through information provided by the County Appraiser and Treasurer, and through a survey of utilities for new customers. See Applicants Ex. 1, at H-8; see also Applicants PF 89-92. Further, Intervenor's have failed to indicate in any way how the tone alert program here fails to comply with FEMA-43. Compare Applicants PF 89-92 with IPF 18. FEMA's pre-filed testimony (on which Intervenor's place exclusive reliance) was based solely on the written plans and procedures, so that the agency's written testimony "noted a number of inadequacies, recommended changes and/or * * * [did not] provide a definitive response due to lack of information" with respect to some matters. However, in the course of the hearing, both through their pre-filed testimony and on cross-examination, Applicants' witnesses "substantially addressed all of the concerns that were raised in FEMA's direct testimony." See Staff/FEMA Brief, at 6. Intervenor's criticisms of the tone alert program are thus without foundation.

ISSUE 12: Public Emergency Planning Education and Information

23. Contention 12(e). Intervenor's express concern that the number and placement of emergency public information billboards at Redmond Reservoir have not been determined, and that the information to be included on the billboards has not been developed. Intervenor's Opinion, at 18-19; IPF 19. While it is true that the precise locations for the billboards have not yet

been identified (and thus the number of billboards needed has not been determined), the cognizant authorities have made the decision to site the billboards on the access roads to the Reservoir. Applicants PF 104. And, although the precise verbiage of the message on the billboards was not yet developed at the time of the hearing, the substance of the message had been determined. The billboards will instruct the public that, upon hearing the sirens or receiving other notification of an emergency, they should tune to an EBS station on their automobile radios for further information such as evacuation routes and registration centers. Tr. 1652 (Lewis); Applicants PF 104. Intervenor's cite no authority to support their position that the specific text and locations of the billboards must be included in the plan, and no practical purpose would be served by the inclusion of such details in the plan.

24. Contention 12(s). Intervenor's maintain that information about the locations to which students would be evacuated should be included in the County Plan and in public information materials. Intervenor's Opinion, at 19-20: IPF 20. As Intervenor's acknowledge, the brochure will advise parents of the host county facility to which their children would be evacuated in an emergency.^{17/} See IPF 20; Applicants PF 118. This same

^{17/} IPF miscites Tr. 1916 for the proposition that this information "is not in the brochure and other information provided before the emergency." That reference however only indicates the view of the FEMA witness that such information should be contained in pre-emergency public information material.

information would be repeated to parents at the time of an emergency via the EBS announcements, which are included in the County Plan. Applicants PF 118; Applicants Ex. 1, App. L. Furthermore, the County Plan specifically identifies the registration centers for schools being evacuated. Applicants Ex. 1, Table 3-6. Intervenor's concerns on this matter are thus resolved.

ISSUE 13: Evacuation of Pregnant Women and Small Children

25. Contention 13(b). Contrary to Intervenor's assertions, Applicants did not testify that "[t]he plan does not provide for transportation for pregnant women and young children if they are to be evacuated before others" (see IPF 21), and it is totally incorrect to allege that in the event of a precautionary evacuation, "there is no transportation provided for [pregnant women and preschool children] if they do not have their own" (see Intervenor's Opinion, at 21). Nor did Applicants testify that these special populations would "be evacuated with the others who need special transportation." See IPF 21.^{18/} Rather, since -- in the postulated situation (a precautionary evacuation) -- pregnant women and preschool children

^{18/} In addition, IPF 21 is clearly incorrect in claiming, "Precautionary evacuations are desirable for this class of the population. Tr. 1709 (Stern)." (emphasis added.) At Tr. 1709, Mr. Stern in fact stated that "one might consider, although I am not suggesting that one do consider, precautionary evacuation" (emphasis supplied).

are the only population advised to evacuate, they will have exclusive use of the school buses (after they have been used to transport their students home, if school is in session). See generally, Applicants PF 122. Moreover, in such a situation, buses from outlying districts would be used, so that Burlington and LeRoy buses would remain available for use should the recommendation for a precautionary evacuation be changed to an order for a general evacuation. Tr. 1285 (Wilcox). And, although planning does not expressly contemplate the possibility, the Emergency Preparedness Coordinator indicated that -- if it were deemed advisable -- school buses from outlying districts could be employed to transport pregnant women and preschool children in a precautionary evacuation, even before the buses were used to take their own school children home. Tr. 1140 (Wilcox). It is thus clear that emergency planning authorities have given careful consideration to and made adequate provisions for transportation for pregnant women and preschool children in the event of a precautionary evacuation. See Applicants PF 120-22. In any event, very few pregnant women or parents with preschool children will not have access to private vehicles for evacuation. Any who needed transportation in the event of a precautionary evacuation would be instructed to call the County Shop for transportation assistance. Applicants PF 121.

ISSUE 14: Evacuation of Schools

26. Contention 14(a). Intervenors' contention originally focused on an alleged need for training of school administrators, teachers, and students. Intervenors now appear to be satisfied that school administrators will be adequately trained. That aspect of the contention therefore is no longer at issue. See Intervenors Opinion, at 21-22; IPF 22. Moreover, although Intervenors mention training for school children in their Opinion and proposed findings, they have provided no citations on the subject nor have they otherwise briefed the issue. Thus, they must be deemed to have abandoned the issue. See Intervenors Opinion, at 21-22; IPF 22. With respect to training for teachers, the uncontroverted evidence indicates that -- in teacher orientation sessions at the beginning of the academic year -- teachers will be advised of their role in an evacuation. Applicants PF 126-27. Because teachers' roles in an evacuation generally parallel their normal activities, and because they are not charged with making the decision to evacuate the schools, teachers need not receive other special training. Applicants PF 124, 126-28. Based on the evidence of record, FEMA now concurs in this judgment. See NRC Staff/FEMA PF 43.

27. Contention 14(b). Intervenors' concerns with respect to the evacuation of school children have been reduced to the use of teacher cars to evacuate a portion of the students from

the Burlington schools. Intervenor's Opinion, at 22-24; IPF 23. Intervenor's assert that the operating license should not issue until arrangements are made for sufficient school buses to evacuate the entire Burlington student body simultaneously by bus. See Intervenor's Opinion, at 24. However, Intervenor's have pointed to no infirmity in the plan for the use of teacher cars, nor have they elicited any other evidence to support the requirement they propose. While the County Engineer could not personally attest to the availability of teacher cars for evacuation, the record indicates that the Superintendent of the Burlington schools made the decision to use teacher cars to transport students who could not be accommodated on buses. Tr. 785 (Bowers). Presumably, the Superintendent's decision was based on his knowledge of the number of teachers employed by the school system, and the number of teacher vehicles generally available at the Burlington schools during the day. Intervenor's further imply that FEMA recommended the procurement of letters of agreement with teachers for the use of their cars. See Intervenor's Opinion, at 23 (Intervenor's supplied no proposed finding to support this argument). To the contrary, FEMA expressly testified that letters of agreement providing for the use of teacher cars are unnecessary. Tr. 1926-27 (Carroll).^{19/}

^{19/} Although Intervenor's Opinion at 23 claims that "FEMA testified that there should be an advance understanding with

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In any event, plans have been made to provide transportation by bus if, for any reason, sufficient teachers' cars were not available in an emergency. Applicants PF 131.

ISSUE 15: Evacuation of Health Care Facilities and Residents
Needing Special Transportation Assistance

28. Contention 15(a). Intervenors criticize the provisions for the evacuation of health care facilities on the ground that there are no written agreements with host health care facilities providing "detail about the type of health services to be provided, the charges for the services, and * * * which hospitals the patients will be evacuated to."^{20/} Intervenors Opinion, at 24-25; IPF 24. Although there are no signed letters of agreement with health care institutions to accept persons evacuated from Coffey County Hospital and Golden Age Lodge, there are existing arrangements with institutions in surrounding counties -- which have always been honored -- which contemplate the transfer of patients in emergency situations. Applicants PF 135-36, 138. Indeed, the existing generic Coffey

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the teachers," the record (which Intervenors failed to cite) shows FEMA stating that teachers "should know in advance" about the use of teacher cars. Tr. 1927 (Carroll). The uncontradicted testimony shows that teachers will be advised of their responsibilities in an emergency in advance. Tr. 1258 (Wilcox).

^{20/} It should be noted that the contention itself does not relate to the existence of written agreements.

County Hospital emergency plan memorializes the agreement of Newman Hospital to accept such patients. Tr. 812-13 (Mueller). Because Newman Hospital has indicated that it would accept 100 Coffey County patients in an emergency, that facility alone could accomodate virtually all evacuees from the Coffey County Hospital and the nursing home. In addition, the County Plan already includes signed Mutual Aid Agreements with Allen County and Anderson County. Applicants Ex. 1, at D-3, D-7. The county hospitals in those jurisdictions have average available bed capacities of 10 and 25, respectively. Applicants PF 136. Thus, there is reasonable assurance that there would be more than enough beds available in health care facilities in surrounding counties to accomodate hospital patients and nursing home residents evacuating from Coffey County.

29. Contention 15(c). Apparently, transportation for ambulatory hospital and nursing home patients is no longer at issue. See Intervenor's Opinion, at 25; IPF 25. Thus, the limited issue remaining is the transportation of the approximately 25 to 30 nonambulatory persons who might have to be evacuated from the Coffey County Hospital and Golden Age Lodge in an emergency. Applicants PF 140. Coffey County's own ambulances can accomodate eight nonambulatory patients. Applicants PF 141. And the County Plan already includes signed Mutual Aid Agreements with Allen, Lyon, Anderson and Franklin Counties. Applicants Ex. 1, at D-3 to D-10. The ambulance services in

those counties have a combined total of twelve ambulances. Applicants PF 141. With the Coffey County ambulance capacity, those resources alone should suffice to evacuate the nursing home and hospital. Cf. Applicants Ex. 1, at K-13. Further, under existing (albeit unwritten) arrangements with other surrounding county ambulance services, Coffey County can (and regularly does) call on their ambulance resources. Applicants PF 141. Finally, although there is no signed agreement between Coffey County and the individual funeral home directors, all directors referenced in the plan are members of the Kansas Funeral Directors Association ("KFDA"), Tr. 821 (Mueller), and have agreed -- through that organization -- to provide vehicles with a combined capacity of 46 stretchers to assist in an emergency. Applicants PF 142. The KFDA has recently reaffirmed its commitment to its role in such an emergency by its action in sending its chief executive officer to a FEMA national course on the subject. Applicants PF 142. Under these circumstances, there is reasonable assurance that there would be sufficient vehicle capacity to evacuate nonambulatory hospital patients and nursing home residents in an emergency.

30. Contentions 15(n) and (o). Intervenor here challenge the provisions for compilation of a list of EPZ residents who may need special assistance in an evacuation. Intervenor Opinion, at 26; IPF 26. Contrary to Intervenor's suggestion here, a list of those who may need special notification

(including the hearing-impaired) is already being compiled. See Paragraph 18, supra. And, although the list of persons who may need transportation assistance in an evacuation is not yet complete, it too is already being developed, and will be maintained and updated in the same manner and on the same basis as the list of individuals needing special notification. Applicants PF 155.^{21/} The provisions for maintaining the list of individuals who may need special evacuation assistance are adequately specified in the County Plan. See Applicants Ex. 1, § 1.2.3. (item 5), 1.2.5 (item 8), 1.2.7 (County Health Nurse, item 1), 3.5, 5.4. And, while FEMA indicates that the accuracy of such a list should be certified annually, the County here will update its list at least once a month. The procedures for updating the list meet with FEMA's approval. Compare Applicants PF 154 with IPF 26.

ISSUE 16: Evacuation of Persons Without Private Transportation

31. Contention 16(a). Intervenor here argue that the County Plan includes insufficient detail about how the County Engineer will determine which members of the public need transportation assistance in an evacuation. In addition, Intervenor insist that "[n]o adequate estimate of the number of

^{21/} The second sentence of Applicants PF 155 should read: "A list of those needing transportation assistance in an evacuation is being developed, and will be maintained and updated, in the same manner and on the same basis as the list of individuals needing special notification."

people that will need special transportation * * * has been prepared." Intervenor's Opinion, at 27-28; IPF 27. As discussed above, the plan does contain sufficient detail about the preparation and maintenance of the list of persons who may need transportation assistance in an emergency. See Paragraph 30, supra. In addition, at the time of an evacuation, some people who normally have private transportation might need transportation assistance. The County already plans to include in the brochure and in the EBS announcements a special phone number at the County Shop for people to call at the time of an evacuation to request transportation assistance.^{22/} Because it would be impossible to accurately estimate the number of persons who might need to call in to request transportation at the time of an emergency, the County need not attempt such an estimate. Tr. 1983 (Carroll). FEMA (on whose testimony Intervenor's rely) testified that their concerns have been resolved by the availability of excess bus capacity. See Applicants PF 156.

33. Contention 16(1). Although the contention itself is limited to the claim that there are not enough vehicles to evacuate those without their own means of transportation, Intervenor's argument is now based largely on the time that it

^{22/} While the County Shop presently has only one phone line installed, the County has committed to add a second line to accommodate callers requesting transportation assistance in an emergency. Tr. 759 (Bowers); see Paragraph 4, supra.

takes for evacuation of those members of the general population without cars, rather than the number of vehicles available to evacuate those individuals. Intervenor's Opinion at 28-31; IPF 28.

34. Intervenor's assertions largely attempt to establish that those members of the general population needing special transportation cannot be evacuated within the 2 1/2 hour estimated evacuation time. Intervenor's Opinion at 28. Other than correctly acknowledging that persons without access to cars will be evacuated by buses, Intervenor's arguments thoroughly misconstrue the record.

35. Intervenor's begin their argument by attempting to show that school buses will not be available soon enough to meet the estimated evacuation time. Intervenor's Opinion at 28-30. Intervenor's first error is that they assume that the school buses may not be available for two hours. Id. at 28; IPF 29. While it might take two hours for Burlington school buses to evacuate their students and return,^{23/} Tr. 778-79 (Bowers), the Burlington buses would be among the last ones to become available if school were in session. Buses from schools outside the plume EPZ (Gridley, Lebo and Waverly) would take their students home and return to the plume EPZ. Tr. 705

^{23/} The two hour time could be extended by decontamination, if that were necessary, or traffic delays. Tr. 779 (Bowers).

(Bowers). This would take 1 1/2 hours. Tr. 705, 707 (Bowers); Tr. 1929, 1945-48, 1991 (Carroll).^{24/} Some LeRoy buses could be available even sooner since LeRoy has more bus capacity than it needs to evacuate its own students. Tr. 694 (Bowers); Tr. 1928 (Carroll). The evacuation of those without their own vehicles will use whichever school buses become available first. Tr. 779, 799 (Bowers). Given the substantial bus capacity available without even considering the Burlington school buses, Tr. 694-96 (Bowers), Intervenor's have failed to show that any buses available later than 1-1/2 hours would be needed for special transportation.

36. Intervenor's then raise a number of factors which allegedly were excluded from their two hour estimate. Intervenor's Opinion at 28-29. For example, Intervenor's complain that no separate estimates were made of the time to load buses at schools, to take students home, or to unload them at evacuation centers. Id.; IPF 29. But the testimony cited by Intervenor's only states that FEMA's witness assigned a time value to the entire process of making the buses available, rather than to each element in that process. Tr. 1990, 1996 (Carroll).

^{24/} IPF 28 supplies two citations for the proposition that buses may not be available for two hours. Tr. 778 (Bowers) relates only to the Burlington school buses. Tr. 1681 (Stern) discussed Mr. Stern's assumption for the purposes of the time estimate study that the buses from Gridley, Lebo and Waverly would be available in two hours.

Intervenors presented no challenge to the overall 1-1/2 hour estimate. Their reference to a speed of 20-30 m.p.h. for the buses (Intervenors Opinion at 28-29; IPF 28) relates to the speeds conservatively assumed for the evacuation time estimate study. Applicants PF 53, 55; Applicants Ex. 1, § 3.3. Intervenors cite to no evidence that those assumptions are inconsistent with the 1-1/2 hour return time estimated for the Gridley, Lebo and Waverly buses.

37. Other factors allegedly omitted are likewise irrelevant. The need to decontaminate buses before they return to the plume EPZ (Intervenors Opinion at 29; IPF 28) does not apply to buses which originated outside the plume EPZ.^{25/} "Unexpected delays," Intervenors Opinion at 29, by definition cannot be expected or estimated. Adverse weather, *id.*, has already been accounted for in the travel times. Tr. 1997 (Carroll). (And if weather were sufficiently unfavorable, shelter would be chosen as the protective action, not evacuation. *Id.*) As for the assumed half hour loading time (Intervenors Opinion at 29; IPF 28), FEMA's projected 1/2 hour for loading is easily accommodated within the overall 2-1/2 hour estimate. Tr. 1996 (Carroll). Finally, Intervenors' assumption that buses from outside the plume EPZ would take 1.5 hours to

^{25/} The reference provided by Intervenors in IPF 28, Tr. 1264 (Wilcox), discusses the possibility that decontamination might delay the Burlington school buses.

take students home in adverse weather and an additional .75 hour to get to a transportation pickup point, Intervenor's Opinion at 30, finds no support in the record or even in Intervenor's own proposed findings.

38. The other part of Intervenor's argument deals with the time needed to bring those people needing transportation to bus pickup points. Intervenor's Opinion at 30-31; IPF 28. Here, too, Intervenor's misunderstand the record. To arrive at their claimed 3 hour evacuation time, Intervenor's Opinion at 31, Intervenor's mistakenly cumulate a 45 minute mobilization period for the resources to transport people to bus pickup points, with a 1-1/2 hour period to transport evacuees from their homes to those points. However, neither the record, nor Intervenor's citation to it, supports this double counting. While the County Engineer did state that under some conditions it might take his personnel as long as 45 minutes to be able to start providing transportation assistance, Tr. 703 (Bowers), he did not state that it would take an additional 1-1/2 hours after mobilization to pick up evacuees and take them to pickup points. The evidence cited to support the latter claim, Tr. 2342-43 (see IPF 28), merely states that with his resources, the County Engineer can transport those needing assistance to collection centers prior to the time the school buses from outside the plume EPZ return, i.e. within one and one-half hours. Tr. 2342-43 (Bowers). Intervenor's have provided no explanation

for adding the two overlapping time periods. In any case, the uncontradicted testimony shows that those people needing transportation assistance can be evacuated from the plume EPZ within the estimated 2-1/2 hour period. Applicants PF 37.

39. Contention 16(m). Intervenor's challenge to the arrangements for the procurement of school buses focuses on the status of the letters of agreement for the use of those buses in an emergency. Intervenor does not appear to dispute the existence of signed letters of agreement with Unified School Districts ("USD") 243 and 245. Rather, Intervenor complains simply that the letters are not presently included in the County Plan. Compare Intervenor's Opinion, at 31-32 and IPF 29 with Applicants PF 167. Since the contention only alleges that the County Engineer had not made arrangements for school buses, the issue of including letters of agreement in the plan is irrelevant. Moreover, the plan itself indicates on its face that those letters will be included in the plan. See Applicants Ex. 1, at D-2. Intervenor's concern is therefore of no moment. Similarly, Intervenor failed to adduce any evidence to suggest any impediment to the approval of the corresponding letter of agreement with Unified School District 244, scheduled to be signed shortly after the close of the evidentiary hearings. See Applicants PF 167. Under these circumstances, Intervenor's concern amounts to little more than a complaint that the letter was not signed at the time of the evidentiary hearing.

Finally, the record evidence indicates that, while all the USD 244 buses are owned by the district, all the buses in USD 243 and 245 are privately owned, and are under contract to those districts. Tr. 776-77 (Bowers). These private contractual obligations between USD 243 and 245 on the one hand, and the bus owners on the other, are no reason to doubt the validity of the independent agreements of USD 243 and 245 with the County for transportation resources in an emergency.

40. Contention 16(n). Intervenors express concern about the availability of buses for the evacuation of hospital patients and nursing home residents, and members of the general public who do not have their own transportation. However, Intervenors' concern is based on the erroneous assumption that, while one group of EPZ residents is being evacuated, "the people waiting for buses could be exposed to radiation." See Intervenors Opinion, at 32-33; IPF 30. The short answer is thus that an evacuation would not be ordered unless it could be accomplished prior to any significant release of radiation. Where an evacuation could not be accomplished prior to the release of radiation, sheltering would be the selected protective action. See Applicants PF 61, 120. This is consistent with the rule that there is no minimum time required to carry out an evacuation. See, e.g., Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-730, supra at 1069, fn. 13, Louisiana Power & Light Co. (Waterford Steam Electric Station,

Unit 3), LBP-82-100, 16 N.R.C. 1550, 1561, 1575 (1982). The result sought by Intervenor would also be inconsistent with decisions which have approved multiple trips by buses. See, e.g., Consolidated Edison Co. of N.Y. (Indian Point, Unit No. 2), LBP-83-68, 18 N.R.C. 811, 985 (1983); Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), LBP-81-59, 14 N.R.C. 1211, 1627-31.

ISSUE 18: Traffic Control, Access Control and EPZ Security

41. Contention 18(a). Intervenor challenge the adequacy of provisions for traffic control in an evacuation, alleging particularly a need for traffic control in Burlington and in the vicinity of Redmond Reservoir. Intervenor Opinion, at 33-34; IPF 31. However, in the County Sheriff's experience since 1975, neither the Sheriff nor the Redmond agency authorities have ever been called upon to control Reservoir traffic. Tr. 681-82 (Freeman). Similarly, the Sheriff's uncontradicted testimony indicates that traffic control for Burlington is unnecessary. Tr. 685 (Freeman). Intervenor also contend that additional traffic control is needed to keep drivers on evacuation routes (assertedly necessary to facilitate expeditious evacuation). Intervenor Opinion, at 34. However, area residents can be expected to be familiar with the local road network, Tr. 656-57 (Freeman), and therefore can be expected to select the most direct route out of the EPZ. And, as to Reservoir visitors who may be unfamiliar with the County roads, the

key determinant of the route they use to exit the EPZ will be the information provided in the EBS announcements. See Tr. 468 (Mileti). FEMA will review the EBS announcements to ensure that they provide sufficient clear information for Redmond Reservoir visitors (see Applicants PF 104).

42. Contention 18(r). Intervenors concede that all roads into the EPZ will be barricaded, and do not even dispute that the cognizant County and State authorities testified that the "secondary roadblocks" will be manned by National Guard personnel. FEMA's concern was resolved by this testimony. Tr. 2030 (Carroll). Intervenors' arguments at this stage are therefore confined to its insistence that the operating license be withheld until the plan is amended to reflect the undisputed fact that the National Guard will man the secondary roadblocks. Intervenors Opinion, at 34-35; IPF 32. Given the County Emergency Preparedness Coordinator's responsibility to annually evaluate the plan and certify its accuracy to the County Commissioners (with any recommendations for appropriate changes), see Applicants Ex. 1, § 5.3, it can be reasonably expected that the County Plan will be amended to reflect the National Guard's manning of secondary roadblocks. In any event, the National Guard's general role in securing the evacuated area (as e.g., through the maintenance of "secondary roadblocks") is already reflected in the State Plan. See Applicants Ex. 2, Tab B, § 2.1.2.4; Figure B-3.

43. Contention 18(aa). Applicants have obviated the concern of this contention as originally framed (staffing for control of the perimeter of the approximately 10-miles radius plume EPZ) Intervenor therefore now seek to effectively litigate a new contention, postulating an expanded plume EPZ, and then challenging the sufficiency of staffing for perimeter control of that redefined EPZ. Intervenor's Opinion, at 35-36; IPF 33. Thus, Intervenor seeks to require emergency evacuation planning beyond the presently established plume EPZ. Accordingly, Intervenor's proposed findings on this subject constitute a thinly-veiled challenge to the Commission's emergency planning regulations, which require only that a license applicant demonstrate the ability to implement protective actions (including evacuation) for an EPZ of approximately 10 miles in radius.^{26/} See 10 C.F.R. § 50.47 (c)(2); 10 C.F.R. Part 50, App. E n.2.

44. Moreover, Intervenor here never proposed a contention challenging the plume EPZ on the ground that radiation and contamination levels could be so great at its perimeter that it

^{26/} Indeed, in developing the regulations on the size of the plume EPZ, "[t]he NRC/EPA Task Force concluded that it would be unlikely that any protective actions for the plume exposure pathway would be required beyond the [about 10 miles radius] plume exposure EPZ." NUREG-0654, at 12. The Task Force further recognized that, in any event, "detailed planning within 10 miles would provide a substantial base for expansion of response efforts in the event that this proved necessary." NUREG-0654, at 12.

should be expanded. Having failed to propose such a contention directly, it ill-behooves Intervenors to attempt to raise the subject "through the back door," depriving Applicants and the NRC Staff and FEMA of the opportunity to either argue the litigability of the subject or present a direct case on the matter. Intervenors' complaint that the record includes "no evidence enough people are available to provide security" for an expanded EPZ, Intervenors Opinion, at 36, only reflects the fact that the issue is outside the scope of the contentions which were litigated.

45. In any event, even when the merits of Intervenors' arguments are considered, their proposed findings must be rejected out of hand. Intervenors have noted no record evidence which affirmatively supports their assumption that "the level of contamination" at the EPZ could reach unacceptably high levels in any given scenario. Nor have they provided any evidentiary support for their assertion that any expansion of the plume EPZ perimeter would necessarily require that more roads be blocked. Finally, Intervenors have failed to point to any evidence to indicate that -- even were the plume EPZ to be expanded, and even were the expansion to necessitate blocking a few additional roads -- there would be insufficient personnel to staff any additional roadblocks.^{27/} See Intervenors

^{27/} In fact, Intervenors have erred in their statement of the organizations charged with EPZ perimeter control. See Interve-

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Opinion, at 35-36; IPF 33. There are 400 National Guardsmen being trained. Tr. 885-86 (Freeman); Tr. 885, 887 (Mannell). These should be adequate resources under any circumstances.

ISSUE 19: Radiation Monitoring and Decontamination

46. Contention 19(e). Intervenor apparently concede, as they must, that an alternate Radiological Defense Officer ("RDO") has been designated. However, Intervenor argue that "[t]he plan must designate such a person by title." See Intervenor Opinion, at 36-37; IPF 76-77. This may be accomplished in some cases (for example, the County Hospital Administrator is designated as the Health and Medical Management Team Leader -- see Applicants Ex. 1, § 1.2.7). In this instance, however, the backup to the RDO is a full-time employee of the County, in the position titled "RDO." Tr. 1410 (Naylor). Thus, it is difficult to discern how Intervenor would have the plan more clearly identify "by title" the alternate RDO. Moreover, while the RDO's backup had not yet completed his training at the time of the evidentiary hearings, the record unequivocally indicates that he will have the standard FEMA RDO training course. See Tr. 1411, 1566-67 (Naylor).

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nors Opinion, at 35; IPF 33. In addition to Sheriff's deputies, County Engineer personnel, and the National Guard (all acknowledged by Intervenor), the Kansas Highway Patrol also has responsibilities in this area. See Applicants PF 198-99.

47. Contentions 19(h) and (i). Intervenor's assert that the operating license should not issue until the County Plan is revised to list the members of the County radiological monitoring team by name and assignment. Intervenor's Opinion, at 37-38; IPF 35. Coffey County currently has about 48 people who have had the FEMA Radiological Monitoring training course and eight hours of classroom training in the use of radiation monitoring instruments. The County plans to train an additional 25 people. Of this group, 21 will be selected for additional training, to qualify as members of the joint radiation monitoring teams. Applicants PF 204. The trainees for the joint radiation monitoring team will be selected from the "brighter students" of the County radiation monitoring personnel. At the time of the hearings, because initial training had not yet been completed, the identification of this group could not yet be made. Tr. 2050-51 (Carroll). And, contrary to Intervenor's representations, Intervenor's Opinion at 37, FEMA did not testify that the roster of team members, with assignments, need be included in the plan.^{28/} See Intervenor's Opinion, at 37; IPF 35. Rather, FEMA testified that such a roster could be

^{28/} Intervenor's generally impugn the level of detail included in the County Plan with respect to the County radiation monitoring team. Intervenor's Opinion, at 37-38. But the plan adequately describes the roles and number of team members in a radiological emergency. See Applicants Ex. 1, §§ 1.2.10, 3.7, 3.10; Applicants Ex. 1, Table 1-1. No further detail need be included in the plan itself.

included in the implementing procedures. Tr. 2031, 2050-51, 2052 (Carroll). Moreover, FEMA did not expect that the members of the County radiation monitoring team would have received their assignments by the time of the hearing; indeed, the assignments need only be made prior to the exercise. Tr. 2051 (Carroll).

48. Contention 19(k). Intervenors assert that plant operation should not be authorized until "enough monitors will be available in the host county [sic; counties] to provide the monitoring for the evacuees and their vehicles. * * * The plan should provide that there will be additional monitors for rechecking evacuees after decontamination and for checking vehicles for contamination and after decontamination." Intervenors Opinion, at 38-40; IPF 36. In calculating how many monitors will be "enough," Intervenors have knowingly used a number of evacuees which is more than twice the population of the plume EPZ. See Intervenors Opinion, at 38; IPF 36. The County Shelter Systems Officer, on whose testimony Intervenors rely, pointed out that his figures were very conservative. Tr. 524-25 (Fritz); see also Tr. 1421, 1567-68 (Naylor). Thus, the sum of the figures provided by the Shelter Systems Officer is very substantially greater than the population of the entire County. Tr. 524-25 (Fritz). Using figures which reflect the expected actual number of EPZ evacuees, FEMA has determined that 26 host county radiation monitoring personnel will be

sufficient. These people will be trained before full power operation of Wolf Creek. Applicants PF 207.

49. Intervenors provide no evidentiary support whatsoever for their position that provision should be made for additional monitors for rechecking evacuees after decontamination and for checking vehicles. The uncontroverted evidence indicates that decontamination need not be performed within any specified time period. Applicants PF 206. Manifestly, then, there is no requirement for additional monitors to check evacuees after decontamination. Similarly, NUREG-0654 does not specify any period of time within which vehicles must be monitored and decontaminated. This can be accomplished after monitoring and decontamination of evacuees has been completed. Applicants PF 209.

50. Intervenors further urge that the Board require the training of additional monitors to "provide relief for the monitors that start the process." Intervenors Opinion, at 40; IPF 36. But Intervenors failed to elicit any evidence to support their assumption that the monitoring and decontamination process will continue so long that "relief" monitors will be necessary. Moreover, Intervenors have failed to recognize that the figure of 26 host county monitors is itself conservative.^{29/} It strains credulity to assume that all persons in

^{29/} The record reflects that the 2-1/2 minute time assumed to monitor each evacuee is itself very conservative. Tr. 1418 (Naylor).

all directions within a 10-mile radius of the plant would be potentially exposed, and thus require monitoring. Thus, some portion of the 26 host county monitors could likely be reserved for use as "relief," if necessary. In addition, if necessary, additional monitoring personnel are available from the Kansas Department of Transportation, or the RDO could dispatch reserve Coffey County radiation monitoring personnel to relieve host county personnel. See Applicants PF 207.

51. Finally, Intervenor urge the Board to require that provisions be made for women evacuees to be checked for contamination by women monitors. Intervenor's Opinion, at 40. However, there is no regulatory basis for such a requirement, and the subject need not be addressed in either the plan or procedures. Tr. 2076-77 (Carroll).^{30/}

52. Contention 19(1). Intervenor concedes that letters of agreement exist with the County fire departments. However, Intervenor maintain that the letters must be modified "to guarantee that the workers will be available" to assist with decontamination at access control positions and, further, that the letters must be incorporated into the plan and reviewed by FEMA. Intervenor's Opinion, at 40-41; IPF 37. The apparent

^{30/} The State Plan's discussion of privacy for individuals being screened for contaminations is supportive of our general confidence that emergency workers would be sensitive to the personal needs and concerns of evacuees. See Applicants Ex. 2, Tab K, § 3.2.

source of Intervenor's concern is the language of the letters of agreement indicating that "[t]he responding fire departments will be requested to send pumper trucks as available to selected access control positions * * *." See Tr. 1439-40 (Naylor) (emphasis added). But FEMA is not concerned about the clause in the letter of agreement qualifying the signer's obligation to "availability." Tr. 2014 (Carroll). Indeed, the experience of FEMA is that parties abide by letters of agreement that are so worded. Tr. 2079 (Carroll).

53. There plainly is no evidence in this proceeding to support Intervenor's suggestion that insufficient numbers of fire personnel might "muster." The five fire departments have 110 personnel to man up to six access control positions. Applicants PF 210. The record is replete with evidence that emergency workers do their jobs. See, e.g., Applicants PF 272-77, 357. And the County Emergency Preparedness Coordinator testified that, based on the historical dedication of the County fire personnel to the fulfillment of their community obligations, he is personally confident that they would respond in an emergency at Wolf Creek. Tr. 1287 (Wilcox).

54. In any event, the emergency plans generally account for the unavailability of workers by identifying many more personnel than would actually be needed. Applicants PF 359. In this instance, for example, there is obviously more than enough personnel and equipment to respond to the six access control

positions, as necessary. Tr. 1438 (Naylor). Thus, based on all the above, there is no need to modify the letters of agreement as Intervenor suggest. There is also no need to order that the letters of agreement be included in the County Plan; the plan indicates on its face that they will be included. See Applicants Ex. 1, at D-2. Intervenor have not justified their insistence that the letters be included in the plan prior to issuance of the license. Accordingly, they can be incorporated into the plan in the annual revision. See Applicants Ex. 1, § 5.3. The County has agreed to make the letters of agreement available to FEMA for review at any time. Tr. 2361 (Wilcox).

55. Contention 19(r). Intervenor maintain that the operating license should not issue until air sampling equipment is available and the plan has been revised to describe the equipment. Intervenor Opinion, at 42; IPF 38. It is undisputed that seven air samplers, being provided by KG&E, are now on order. The State Plan will describe this new equipment when it becomes available (prior to the full-scale exercise). Applicants PF 212.

56. Contention 19(aa). The Intervenor have limited their concerns on this issue to an assertion that the joint radiation monitoring teams should be in direct radio contact with the County EOC. Compare Applicants PF 217 with Intervenor Opinion, at 42-43 and IPF 39. Intervenor have adduced no affirmative evidence whatsoever to indicate why contact should

be with the County EOC. To the contrary, the EOF serves as the base of operations for the joint radiation monitoring teams. The teams are formed at the EOF, and are directed from there by the KG&E Radiological Assessment Manager and a representative of the Kansas Department of Health and Environment. In addition, samples are analyzed there, at the EOF laboratories. See Applicants Ex. 1, § 3.10. Pertinent information is supplied to the EOC by the EOF via radio and/or telephone. Applicants PF 217. There is no requirement that there be direct communication between the EOC and the teams.31/

57. Contention 19(hh). Intervenors assert that the emergency public information brochure and the EBS announcements must indicate that all evacuees are to go to registration centers to be checked for contamination. Intervenors Opinion, at 43-44; IPF 80. The EBS announcements will instruct all evacuees to proceed to registration centers. Applicants PF 220. The EBS announcements here will be expanded, as indicated, to explain the nature of the hazard posed by radiation and the availability and efficacy of contamination checks. These revisions will provide assurance that the public will

31/ Criterion F.1.d of NUREG-0654, cited by Intervenors Opinion at 42, does not require direct communications, but only that communications be provided between the plant, the EOF, and EOC and radiological monitoring teams. FEMA does not require direct communications between the EOC and the teams. FEMA-II, at 131.

avail itself of radiation monitoring services at registration centers. Applicants PF 222. On the recommendation of Dr. Mileti, similar information will be incorporated into the public information brochure. Tr. 1373-74 (Scott).

58. Contention 19(kk). Intervenors assert that provisions must be made for the disposal of radioactive wastes at commercial sites, and that letters of agreement with those sites must be incorporated into the plan. In addition, Intervenors assert that the County should obtain letters of agreement with the host counties indicating that they will permit the disposal of contaminated water through their waste systems. Intervenors Opinion, at 44-45; IPF 44.

59. Intervenors have pointed to no affirmative evidence that the plant site could be inaccessible to provide the necessary services in an emergency.^{32/} In addition, it is impossible to discern what Intervenors are referring to as "commercial

^{32/} In an attempt to support their case, Intervenors have distorted the evidentiary record beyond recognition. Contrary to Intervenors' representations, Mr. Mannell did not testify that the plant might not be available for decontamination services or waste disposal, due to contamination onsite. Rather, Intervenors' counsel inquired, "What if we had an accident that * * * made it not possible to use Wolf Creek; what would happen?" And Mr. Mannell responded simply, "I do not have that information." Compare IPF 41 with Tr. 1445 (Mannell). Similarly, Intervenors cite the testimony of Mr. Lewis, out of context, for the proposition that there are no letters of agreement with commercial services. Intervenors have ignored Mr. Lewis' next breath -- that such letters of agreement are unnecessary (due to the commercial nature of the service provider). Compare IPF 41 with Tr. 1571 (Lewis).

sites." Intervenors have failed to address the record evidence which explains that, if KG&E could not process the contaminated materials itself, it could either contact another utility and process the material at that location, or it could contract with a local vendor specializing in decontamination services, and arrange for the use of a portable decontamination unit. Applicants PF 226. No letters of agreement are necessary with such commercial enterprises. These vendors are in the business of providing such services. Tr. 1571 (Lewis). Similarly, Intervenors failed to elicit on the record any foundation in fact for their apparent assumption that letters of agreement with the host counties are necessary for the disposal of contaminated water. They have not indicated why the host counties' agreements to assist with registration, monitoring, decontamination and sheltering did not necessarily acknowledge the disposal of water used in the decontamination process. Nor is there any indication that the host counties would object to the disposal of such water. This is not surprising in light of the State Plan's recognition that decontamination water may be disposed of without special treatment. Applicants Ex. 2, § 3.6. Indeed, the State does not believe that the water would present a public health and safety problem. To provide assurance to the host counties, the State plans to monitor the disposal of this water in the host counties. Applicants PF 219, 226. Thus, the record here is simply devoid of support for the letters of agreement Intervenors would require.

ISSUE 20: Shelter Facilities and Services

60. Contention 20(d). Claiming that patently inflated numbers of evacuees will report to each registration center,^{33/} Intervenor argue that letters of agreement must be obtained for evacuee registration, sheltering and food service. Intervenor's Opinion, at 45-46; IPF 42-43. But Intervenor have failed to support their argument with any evidence that even suggests that such letters of agreement are needed. Indeed, all the evidence is to the contrary. In those counties where registration centers will be staffed by school personnel, the responsibility is not a new one; those assignments were already reflected in pre-existing Crisis Relocation Plans (developed for nuclear emergencies other than Wolf Creek). Indeed, high-level school district officials serve as the Reception and Care Coordinators. Tr. 603-04, 606 (Fritz). And, in the experience of the Coffey County Shelter Systems Officer, there is nothing to indicate any reluctance of school teachers to assist in emergencies, under the direction of the School Board and the Superintendent. Tr. 634 (Fritz). Under such circumstances, FEMA believes that letters of agreement are unnecessary for the provision of registration services. Tr. 2108 (Leonard).

^{33/} The numbers of evacuees postulated in IPF 98 cannot go to the identified host counties, because the sum of those numbers is very substantially greater than the population of even the entirety of Coffey County. See Paragraph 48, supra.

Similarly, while there are no written agreements with the Lyon County service organizations to assist with registration, there are verbal agreements that have been honored in the past, and are expected to be honored in the future. Tr. 604-05 (Fritz). In fact, even in the counties where school personnel are charged with registration, past experience indicates that service organizations will also volunteer to help, so that there would be many more volunteers than needed. Tr. 635 (Fritz).

61. The Emergency Preparedness Coordinators for the four host counties have contacted food suppliers, who have agreed to provide food on request and arrange for payment afterward. None of the four host county coordinators believes that written agreements for food are necessary; all are confident that they have binding verbal agreements with their suppliers. As the Coffey County Shelter Systems Officer summed up their sentiments, "[A] handshake is a whole lot better than the signed contract." Tr. 537-38, 540-41, 552, 556 (Fritz). FEMA agrees that such letters of agreement are unnecessary. Tr. 2114 (Leonard). Food service in the host counties could be provided by the Red Cross, Salvation Army, church organizations or other volunteers. Tr. 600-01 (Fritz). Church organizations routinely provide such services in emergencies, even in the absence of written agreements. Tr. 537 (Fritz). And the pre-existing Crisis Relocation Plans for all four host counties include both the Red Cross and the Salvation Army as support

groups. Tr. 553 (Fritz). Moreover, the Coffey County Shelter Systems Officer has been personally assured by the Kansas-Missouri area Director of Emergency Services for the Salvation Army that his organization stands ready to respond to an emergency. Tr. 569 (Fritz). And the State Plan includes a letter of agreement with the Red Cross. Applicants PF 236.

62. Shelter facilities in the four counties will be staffed by volunteers from service organizations. Those organizations have assured the host county Emergency Preparedness Coordinators that they have sufficient personnel to discharge their responsibilities under their verbal agreements. Tr. 558-60 (Fritz). The Kansas Department of Social and Rehabilitation Services ("SRS") is also available to assist with registration and sheltering in an emergency. Because SRS is a state agency, no letter of agreement is necessary. Applicants PF 235.

63. Finally, even if sufficient numbers of host county workers were -- for some reason -- unavailable for some period of time, the evacuees themselves could assist with registration, food service, and shelter. Tr. 568-69, 635 (Fritz).

64. In sum, the Coffey County Shelter Systems Officer and Dr. Miletic (a sociologist with special expertise in the study of public emergency response) testified that -- based on, respectively, their local emergency response experience and studies of disasters -- the absence of written agreements has

never resulted in the unavailability of sufficient personnel to staff registration/public shelter facilities. Nor were they aware of a single case in which the absence of written agreements resulted in a failure to provide food for evacuees. Tr. 566-68 (Fritz, Mileti). Accordingly, the Board cannot sustain Intervenor's unsupported assertions of need for letters of agreement for host county services.^{34/}

65. Contentions 20(k) and (m). Intervenor insist that letters of agreement must be obtained for registration centers, shelters and food service for evacuees, as a precondition to authorization of plant operation. Intervenor's Opinion, at 46-47; IPF 44. The registration centers and congregate care facilities which would be used in an evacuation are generally community buildings (a university, schools, civic buildings, etc.) or buildings owned by non-governmental institutions (churches, fraternal organizations, etc.). Applicants PF 246. It has been FEMA's experience that such public facilities have been willingly made available in emergencies, even in the absence of prior arrangements. Tr. 2097-98 (Carroll). See also

^{34/} Intervenor's argue, in passing, that the license must not issue until host county workers are trained. See Intervenor's Opinion, at 46. However, Intervenor's have provided no citations to the record on this subject. Prior to each annual exercise, the Coffey County Emergency Preparedness Coordinator will conduct training for the host county Reception and Care coordinators and some staff, using the FEMA Shelter Systems training course. Applicants Ex. 1, § 5.1, Table 5-1. Intervenor's have indicated no infirmity in this provision.

Tr. 566-67 (Fritz, Mileti). In addition, there are verbal agreements already which have always been honored. Tr. 531, 533-34 (Fritz). Accordingly, there is no need to require such letters of agreement for registration center and shelter facilities. The need for letters of agreement for food service has been addressed in Paragraphs 60-61, supra.

ISSUE 25: County EOC Evacuation

66. Contention 25(a). The County EOC is located in the basement of the County Courthouse and has a "protection factor" against radiation of over 100, which satisfies FEMA. Applicants PF 261. Neither NUREG-0654 nor any other regulation or guidance document dictates provision for a backup EOC. Applicants PF 262. In these circumstances, Intervenor's proposed requirement for a letter of agreement with an alternate EOC lacks a legal basis. See Intervenor's Opinion, at 48; IPF 45. Nevertheless, the County has given careful consideration to other options for a base of operations, should it be necessary for some reason to evacuate the EOC, and has made arrangements for their use. See Applicants PF 262.

ISSUE 28: Dose Control for Emergency Workers

67. Contentions 28(a),(b),(d),(e). Next, Intervenor's generally attack the provisions for controlling the radiological exposure of emergency workers. See Intervenor's Opinion, at 48-51; IPF 46-49. Intervenor's concede that each worker will receive both a self-reading dosimeter and a TLD.

Intervenors also concede that the RDO's testimony at the hearing listed the categories of emergency workers to receive dosimetry, and the number of workers in each category. But, purportedly relying on FEMA's testimony, Intervenors insist that the plan must indicate which workers will receive dosimeters, including a list of the categories of workers and the number of workers in each category. Contrary to Intervenors' suggestion, FEMA indicated that the identification by category of emergency workers to be issued dosimetry could be included in either the plan or the procedures. Tr. 2193 (Carroll).

68. Intervenors further assert that there is no evidence that the host counties or the Redmond agencies have plans to issue dosimetry. To the contrary, the Kansas Fish and Game ("KF&G") personnel will have prepositioned dosimetry. Tr. 1560, 1571-2 (Mannell). And KG&E will provide dosimetry to USEWS, for prepositioning. Tr. 1572 (Lewis).^{35/} The four host counties have ample dosimetry for host county radiological monitors. Tr. 1571 (Mannell); Applicants PF 207; Tr. 2195-96, 2209-10 (Carroll).

69. Intervenors also argue that the plan does not make provision for recording doses received by host county and

^{35/} The record does not reflect the provisions for dosimetry for the Corps of Engineers. In any event, the Corps has no specified role in emergency response. See Applicants PF 173.

Redmond agency workers. But, when self-reading dosimetry is issued, it is accompanied by a record card, which includes instructions for recording exposure. Tr. 1514. (Naylor). And emergency workers will be trained to maintain exposure records from their self-reading dosimetry. Tr. 2213-15 (Carroll). Moreover, the State plan does include instructions for dose recording for all state employees, including KF&G. Tr. 1574 (Mannell). Thus, Intervenor's concerns are baseless.

70. Intervenor's next claim is that the plan does not specify where dosimetry will be prepositioned, and does not indicate where emergency workers (including fire department personnel and ambulance/ funeral director personnel) will pick it up. However, County procedures will provide for prepositioning of dosimetry at the EOC, the County Shop, the Burlington and LeRoy fire departments, the hospital and nursing home, in Sheriff's patrol cars, and in Burlington school buses. This plan is acceptable to FEMA. And all emergency workers will be trained in the location of their dosimetry. Applicants PF 281. Thus, there is no need to include such information in the plan. Intervenor's also observe that the dosimetry was not prepositioned at the time of the hearing. Because Intervenor's have failed to adduce any evidence to suggest any impediments to the plans for prepositioning dosimetry, suffice it to note that the plant was not operating at the time of the hearing. Finally, Intervenor's express concern that extra TLD's are stored at the plant site.

However, the record is clear that the TLD's at the plant site are a backup supply, and that there are already sufficient TLD's available apart from that supply. Tr. 2216 (Carroll). Thus, emergency response will not be hindered should the supply at the site be unavailable for some period of time for any reason.

ISSUE 29: Training

71. Contention 29(c). Intervenors insist that the operating license not issue "until the details of the joint training program have been completed and adopted by the county." Intervenors Opinion, at 52; IPF 50. Not only will the County have adopted the content of the joint training program by the time the license issues, the County will have implemented the training program by then. Indeed, initial training under the joint training program will be completed prior to the full-scale exercise. See Applicants PF 298.

72. Contention 29(g). Intervenors next argue that the operating license must not issue until the County Plan is revised to reflect the additional training which the County has committed to provide. Intervenors further assert that the County Plan must make provision for training for host County Commissioners, host county Sheriffs, and host county Emergency Preparedness Coordinators. The Licensing Board is confident that Table 5-1 (the training matrix) will be revised not later than the annual revision of the County Plan, which will take

place in early Fall 1984. See Paragraph 42, supra; Applicants Ex. 1 (dated September 1983). Intervenors have failed to indicate why this need be accomplished sooner.

73. The short answer to Intervenors' arguments with respect to the specified host county officials is that the arguments effectively constitute a new, and extremely untimely, contention. The Licensing Board has already ruled that questions as to the training of these individuals is beyond the scope of the admitted contentions. Tr. 2252-56 (Wolfe). Although the Intervenors timely framed detailed contentions on the subject of training, including contentions as to some host county personnel (see, e.g., Contentions 29(h)(21) and (22) -- host county shelter personnel), Intervenors never even proposed a contention on the training of the host county officials discussed here.

74. Moreover, even the merits of Intervenors' proposal are not persuasive. While the identified host county officials do have roles under the host county shelter plans, those roles generally parallel the responsibilities which attend their positions in a non-emergency situation. See, e.g., Applicants Ex. 1, Appendix J (host County Commissioners responsible for control of county and city agencies, issuance of proclamations and curfews, establishment of policy on allocation and expenditure of funds, etc.; host county Emergency Preparedness Coordinator opens host county EOC, activates host county

organizations, monitors need for resources, etc.; and host county Sheriff responsible for law enforcement and security, and traffic control assistance). Intervenors have completely failed to indicate what training the identified host county officials would require beyond that training and experience which the officials must be assumed to have received to carry out their non-emergency duties on a daily basis. Nor have Intervenors demonstrated that the host county officials will not receive whatever this "required" training might be. Under these circumstances, Intervenors' proposal must be summarily rejected.

75. Contention 29(h). The contention makes the general assertion that a lengthy laundry list of personnel have not been trained, but further discuss (with the requisite citations to the evidentiary record) only the training to be provided for Coffey County radiation monitoring personnel.^{36/} Intervenors Opinion, at 53, 54, 85; IPF 52. While training had not been completed at the time of the hearings, the uncontradicted evidence of record indicates that training will be completed prior to the full-scale exercise. Applicants PF 298.

76. Contention 29(k). Intervenors express concern about the training of replacement workers, and exhort the Licensing

^{36/} See Section II, n.2, supra (dismissing unbriefed subcontentions).

Board to withhold the license until "the details of the replacement training program are included in the plan and the materials needed to implement the program are prepared." Intervenor's Opinion, at 54-55; IPF 53. However, the record is replete with testimony that new and replacement personnel will be trained using videotapes of the initial training sessions, so that new and replacement personnel will receive the same training as those who attend initial training.^{37/} Tr. 891-92, 919-20 (Mannell); Tr. 1182, 1184 (Wilcox); Tr. 1640-44 (Lewis); Tr. 2261, 2264-65 (Leonard). Thus, Intervenor's concern is obviated: when initial training is completed -- prior to the full-scale exercise (see Tr. 1623 (Lewis)) -- the "replacement training" materials will also be complete. And, in any case, since there is no evidence that replacement training will be needed before issuance of the operating license, there is no need that the materials for such training be prepared before that time.

77. Contention 29(q). Just as Intervenor urged that the operating license be withheld until the County Plan is amended to reflect the additional training the County has agreed to provide (see Intervenor's Opinion, at 52-53), Intervenor here argues that the operating license should be withheld until the

^{37/} As one of the witnesses on the subject indicated, the details of this training program are more appropriately specified in procedures than in plans. Tr. 891-92 (Mannell).

State Plan is amended to reflect the additional training the State has agreed to provide. Intervenor's Opinion, at 55-56; IPF 54. Like the County, the State also reviews and updates its plan annually. See Applicants Ex. 2, Tab P. Intervenor's have failed to provide any indication why this schedule must be expedited, and the plan updated earlier than September 1984 (one year from the last revision date). Accordingly, their position must be rejected.

78. Contention 29(s). Intervenor's observe that, at the time of the hearing, training of state emergency workers had not been completed, and -- based on that observation -- Intervenor's urge the Board to withhold the operating license until the emergency workers have received training as indicated in the State Plan. Intervenor's Opinion, at 56, 88; IPF 55. Intervenor's have apparently overlooked the commitment to complete all initial training prior to the full-scale exercise. See Tr. 1623 (Lewis). Thus, there is no need to impose the requirement they recommend.

79. Contention 29(u). Intervenor's next assert that the operating license should not be issued until the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service personnel have received the training prescribed for them under the County Plan (as amended in the course of the hearings). Intervenor's Opinion, at 56-57; IPF 56. As noted above, all such training will be completed prior to the full-scale exercise.

See Tr. 1623 (Lewis). Thus, there also is no need to condition the license here.

ISSUE 31: Resource Availability and Allocation

80. Contention 31(c). The Intervenor's do not challenge the adequacy of the radio equipment which will be available for the fire departments. Nonetheless, Intervenor's would have the Board withhold the operating license until the new County radio system is installed, which will allow all County fire departments to communicate with the Sheriff's Office and the County EOC. Intervenor's Opinion, at 57; IPF 57. The equipment is already on order. Tr. 1189 (Wilcox). Intervenor's have not pointed to anything which would indicate that the radios will not be installed before the full scale exercise.

81. Contention 31(d). As with the preceding contention, Intervenor's do not attack the adequacy of the Road Department radio equipment which will be available. Nevertheless, Intervenor's also maintain that the new County radio equipment must be installed before the license is issued, so that the County Engineer's radio-equipped vehicles will have the capability to communicate with the Sheriff's Dispatcher and the County EOC. Intervenor's Opinion, at 58; IPF 57. The equipment is on order. Tr. 746 (Bowers). Intervenor's have not pointed to anything which would indicate that the system will not be installed before the full-scale exercise.

82. Contention 31(f). Although the contention argued that "protective gear against radiation is needed for all workers who are involved in the evacuation plan," Intervenors have now restricted their argument to protective clothing for the field radiation monitoring teams. Intervenors Opinion, at 58-59; IPF 59. Since there will be a maximum of seven teams, with three members each, Applicants Ex. 1, § 3.10, only 21 sets of protective clothing would be needed. And Intervenors do not challenge the existence of enough sets of protective clothing, given the 100 sets set aside for use by emergency workers, with 1900 additional sets available if necessary. Applicants PF 329.

83. Intervenors now seek to argue that not only must there be enough sets of protective clothing but that the protective clothing may not be kept at the plant site. Intervenors Opinion at 59. The only basis for this argument is the unsupported statement that the "nature of the accident at the plant might be such that the clothing would not be available."^{38/} Given the very detailed contentions, Intervenors are not entitled to raise a new issue -- where protective clothing

^{38/} The only arguable basis for this statement is for the marginally related finding statement that "the protective clothing would be needed after the accident occurred at the plant site. Tr. 1530 (Naylor)." However, the cited reference bears no resemblance to this finding. And, in any case, the finding does not support the Intervenors' underlying proposition that the nature of the accident might make it impossible to access protective clothing at the plant site.

should be stored -- at this late stage. And Intervenor's have pointed to nothing in the record supporting the claim that the protective clothing would be inaccessible in the time frame that it was needed. Intervenor's have failed to indicate any basis for considering this fourth order hypothetical.

Waverly Contention and Stipulation

84. On January 5, 1984, the Licensing Board admitted a late-filed contention submitted by Intervenor's relating to the town of Waverly. Memorandum and Order (Granting Intervenor's Motion to Add Contention and Witnesses). By Joint Stipulation, counsel for Intervenor's, Applicants, the NRC Staff and FEMA agreed that the contention would be withdrawn and that certain emergency preparedness measures would be taken with respect to Waverly. All Parties Ex. 1. On February 14, 1984, the Licensing Board accepted the Joint Stipulation.

85. In their Opinion, Intervenor's now ask the Licensing Board to order that the operating license not be issued until the conditions specified in the Joint Stipulation have been incorporated into the County Plan and "until the Applicants and Coffey County have demonstrated that they have met all the conditions in the stipulation." Intervenor's Opinion at 60.

86. Intervenor's effectively seek to retain the benefits of the Joint Stipulation with one hand while attacking it with the other. Such action contravenes the general rule,

recognized in NRC practice, that "one who accepts the benefits of a judgment, decree or judicial order is estopped to deny the validity thereof." See The Toledo Edison Co. (Davis-Besse Nuclear Power Station), ALAB-300, 2 N.R.C. 752, 767 (1975). See also The Toledo Edison Co. (Davis-Besse Nuclear Power Station), LBP-75-49, 2 N.R.C. 365, 369 (1975) (acknowledging the principle that "one making a bargain ought to fulfill his obligation, particularly where there appears to have been a reasonable quid pro quo associated with the agreement." The Licensing Board here has similarly admonished the parties with respect to the solemnity attendant to such stipulations among the parties (Tr. 592, 610-12 (Wolfe)), and must adhere to that position. Intervenors must honor their agreement.

87. Moreover, while the Joint Stipulation and its commitments are binding on all parties, the withdrawal of the Waverly contention serves to remove these matters from the jurisdiction of the Licensing Board, 10 C.F.R. § 2.760a, and place them within the purview of the NRC Staff and FEMA. Because there is no longer a pending contention on these issues, it is inappropriate for Intervenors to seek to place the matter back before the Licensing Board.

IV. CONCLUSION

For the reasons set forth above, Applicants respectfully submit that Intervenor's Proposed Findings of Fact and Conclusions of Law, and the arguments set forth in their brief, should be rejected.

Respectfully submitted,

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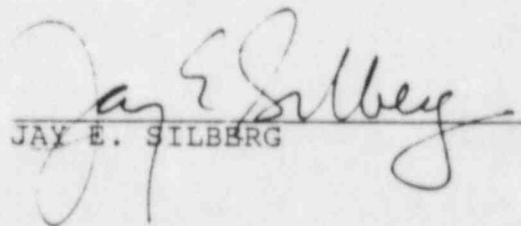
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

CERTIFICATE OF SERVICE

This is to certify that copies of the foregoing "Applicants' Reply to the Proposed Findings of Fact, Conclusions of Law, and Briefs Filed by Intervenors and NRC Staff/FEMA" were served by deposit in the United States Mail, first class, postage prepaid, this 19th day of April, 1984, to all those on the attached Service List.


JAY E. SILBERG

DATED: April 19, 1984

UNITED STATES OF AMERICA
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