

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of)

KANSAS GAS & ELECTRIC COMPANY)
et. al.)

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

Docket No. 50-482

JOINT ANSWERS OF INTERVENORS CHRISTY AND SALAVA TO APPLICANTS'
SECOND SET OF INTERROGATORIES TO INTERVENORS CHRISTY AND SALAVA

The following are the answers of the intervenors, Mary Ellen Salava and Wanda Christy to the Applicants' Second Set of Interrogatories directed to them dated April 1, 1982. The response of each intervenor to each interrogatory is the same unless otherwise noted.

Interrogatory 1. Your response number 1 to Interrogatory EP-5 states that 2 people (in addition to the Emergency Planning Coordinator) are required for Coffey County to provide training for personnel in evacuation procedures and other procedures required for personnel to implement an evacuation plan. Explain in detail how you determined that 2 additional people were required to carry out this function and provide all assumptions on which this explanation is based.

Answer: Two people are required to carry out this function. Only one person is available at the present time. One additional person is required in order to provide backup

when the other person is not able to be present. Also, there will be times when there will be more work than one person can do or one person may not be able to serve continuously for long periods of time and will need to have relief.

Interrogatory 2. Your response number 2 to Interrogatory EP-5 states that 67 people (in addition to 10 available Sheriff's Department personnel and 3 available Burlington Police Department personnel) are required for Coffey County to make "the initial notification of an emergency in the required time."

- a. What is "required time" and where (and by whom) is it required?
- b. Explain in detail how you determined that 67 additional people were required to carry out this function and provide all assumptions on which this explanation is based.

Answer:

- a. NUREG 0654, Table 2, page 14, provides that an atmospheric release may commence in one-half hour and that it takes one half to two hours to travel five miles. Therefore, fifteen minutes warning time is the barest minimum necessity to prevent radiation exposure. This is being conservative since atmospheric conditions may shorten the time. The Coffey County Sheriff is under the assumption that he has fifteen minutes to notify all people. 10 CFR, Part 50, Appendix D, IV, 2 requires that notification be done within 15 minutes.

- b. I stated that 67 people would be required to perform this function and that 10 were available. However, I have revised my answer. The revised answer is that it will take 81 people to warn the people living in Coffey County within fifteen minutes. There are 335 miles of road in the 10 mile emergency planning zone. Of this, 55 miles are in the towns of Burlington, New Strawn, Waverly, and LeRoy. If a vehicle travels at five miles per hour in these towns, it will take 44 vehicles and drivers to cover all of the areas in those cities in 15 minutes. There are 280 additional miles in the balance of the 10 mile zone, and if a car travels at 30 miles per hour, it will take 37 cars and drivers to cover those roads and provide the necessary warning in 15 minutes.

Interrogatory 3. Your response number 3 to Interrogatory EP-5 states that 2 people (in addition to the Sheriff) are required for Coffey County to adequately direct the evacuation. Explain in detail how you determined that 2 additional people were required to carry out this function and provide all assumptions on which this explanation is based.

Answer: Two people in addition to the Sheriff are required in order to perform this function. The Sheriff can not be expected to work 24 hours per day. Neither can he be expected to be available all the time. It will take one person knowledgeable about the evacuation procedures for each eight hour shift.

Interrogatory 4. Your response number 4 to Interrogatory EP-5 states that 6 people are required for Coffey County to provide ambulances and at the same time provide for evacuation of hospital patients. Explain in detail how you determined that 6 people were required to carry out this function and provide all assumptions on which this explanation is based.

Answer: Two ambulances are available. Two emergency medical Technicians are required for each ambulance, and two others will need to assist them.

Interrogatory 5. Your response number 5 to Interrogatory EP-5 states that 6 people are required for the Coffey County Hospital to provide for special treatment of emergency patients and at the same time assist with evacuation of its regular patients.

- a. Explain in detail how you determined that 6 people were required to carry out this function and provide all assumptions on which this explanation is based.
- b. How many (if any) emergency patients from the Wolf Creek site did you assume would be treated at the Coffey County Hospital concurrent with an evacuation?
- c. Can the functions identified in your responses numbers 4 and 5 to Interrogatory EP-5 be performed by the same 6 people, or do you assert that 6 people are required to perform the functions identified in your response number 4 in addition to the 6 people needed to perform the functions identified in your response number 5?

Answer:

- a. It will take 6 people to evacuate the patients from the hospital. There are usually 4-16 patients at the hospital. I have made the assumption that these will all have to have assistance in being taken from the hospital. It will take 6 people to do this. The normal staff at the hospital will be required to be available to treat any one injured in an accident at the plant. Therefore, it has to be assumed that they are not available for evacuation uses.
- b. I did not make any assumption as to the number of patients from the Wolf Creek site. However, we have to make the assumption that there may be some, and that if that is a significant number, all of the personnel at the hospital will be required to provide treatment for them. Also, the patients from the Wolf Creek site may have radiation exposure. They would have to be kept away from other patients and hospital personnel. Therefore, the hospital personnel would not be available to handle an evacuation because they might have been exposed to some one who had been at the plant site and would therefore contaminate a regular patient.
- c. Six people will be required for each of these functions. I have assumed that the ambulance personnel will not be available for evacuation of hospital patients.

Interrogatory 6.

Your response number 6 to Interrogatory EP-5 states that 45 people (in addition to 1 available Radiation Monitor) are required for Coffey County to provide radiological monitoring. Explain in detail how you determined that 45 additional people

were required to carry out this function and provide all assumptions on which this explanation is based.

Answer:

One monitor for radiation would be required for each eight hour shift at the hospital. This requires three people. I have determined that eight primary roadblocks are necessary and that one monitor is required at all times at each of the road blocks. This means that there are three shifts during a 24 hour period at the roadblock. Therefore, 24 monitors are needed. Finally, 18 additional monitors are needed to provide three 8 hour shifts of 6 persons each to monitor any other "hot spots" within the area. This makes a total of 45.

Interrogatory 7.

Your response number 7 to Interrogatory EP-5 states that 212 people (in addition to 35 available National Guard) are required for Coffey County to provide adequate traffic control and roadblocks.

- a. Explain in detail how you determined that 212 additional people were required to carry out this function and provide all assumptions on which this explanation is based.
- b. Identify all basis for your statement that 35 National Guard personnel are available to carry out this function.

Answer:

- a. Two hundred fourteen people in total are required for traffic control and handling of roadblocks. Seven people will be

required in Burlington for traffic control. There are four major roads out of that city. Two will be required for traffic control at New Strawn, and 7 will be required for 6 other blacktop roads and one other major road from the plant going east and leading out of the county. Each will need a roadblock because people may try to use them to enter the area. Also, there are 66 other roadblocks marked in Figure 3-5 of the Coffey County Plan which will need to be blocked to prevent people from entering the emergency planning zone and other dangerous areas. The 66 roadblocks will need to be manned 24 hours per day by three shifts. This will require 198 people. The total of the above is 214 persons.

- b. There are 63 people in the National Guard unit at Burlington. Eighty percent of them are from Coffey County, and the others are from as far away as Coffeyville, Kansas and the State of Missouri. Eighty percent of the 63 would be likely to be in the county. This is 50 National Guardsmen. However, they will not all be available, and many live in outlying towns where they are more than fifteen minutes away from the unit's headquarters. Thirty-five is a reasonable estimate of the number that will be available. For example, after a recent tornado in Pittsburg, Kansas, only a small percent of the unit was available.

Interrogatory 8. Your response number 8 to Interrogatory EP-5 states that 16 people (in addition to 8 available Burlington Fire Department personnel) are required for Coffey County to provide for de-

contamination at roadblocks. Explain in detail how you determined that 16 additional people were required to carry out this function, and provide all assumptions on which this explanation is based.

Answer:

The Coffey County Plan, Figure 3-5, shows 5 places for decontamination. This is not adequate. One is needed at every roadblock for which 7 are shown, and one additional one should be at FAS 10. For 3 eight-hour shifts during a day, one person will be required for each shift at each of 8 decontamination points. This is 24 total people, and only 8 Burlington Fire Department people are available. Therefore, 16 additional people are required.

Interrogatory 9.

Your response number 9 to Interrogatory EP-5 states that 50 people are required for Coffey County to adequately aid in providing transportation for evacuation for those who do not have their own means of transportation. Explain in detail how you determined that 50 people were required to carry out this function, and provide all assumptions on which this explanation is based.

Answer:

I have assumed that 50 people will be assigned to vehicles to help evacuate people without transportation. If a vehicle could carry 6 people in addition to the driver, 300 people could be evacuated by these 50 people. Out of a population of 9370 for Coffey County it is very conservative to assume that only 300 people will need to be evacuated because they do not have their own form of transportation. This does not even include school children.

Interrogatory 10. Your response number 10 to Interrogatory EP-5 states that 3 people are required for the State of Kansas Department of Emergency Preparedness to provide the necessary training for personnel involved with the emergency evacuation plan and to conduct emergency preparedness drills. Explain in detail how you determined that 3 people were required to carry out this function and provide all assumptions on which this explanation is based.

Answer: An emergency planning drill and the evacuation plan require 500 people. Therefore, it is essential that the State of Kansas have enough people to develop and supervise a drill such as this and to train the evacuation plan personnel. It is not possible for less than 3 people to do this. The people to do this are not on the staff of the Emergency Preparedness Department at the present time.

Interrogatory 11. Your response number 11 to Interrogatory EP-5 states that 45 people (in addition to 10 available Sheriff's Department personnel and 3 available Burlington Police Department personnel) are required for Coffey County to provide security for evacuation areas. Explain in detail how you determined that 45 additional people were required to carry out this function and provide all assumptions on which this explanation is based.

Answer: Forty Five total people are required for security purposes. Thirteen of these would be available from the Coffey County Sheriff's

Department and the City of Burlington Police Department. Therefore, 32 additional people will be required. The 10 mile emergency planning zone is a large area. I have assumed that there will be 15 people on each of 3 shifts. These people will provide security for the area. This means that 45 people will be required.

- Interrogatory 12. Your response number 12 to Interrogatory EP-5 states that 3 people are required for Coffey County to carry out the duties assigned to the New Strawn EOC.
- a. Specify the duties to be carried out by Coffey County at the New Strawn EOC.
 - b. Explain in detail how you determined that 3 people were required to carry out those duties and provide all assumptions on which this explanation is based.

- Answer:
- a. The Applicants' Emergency Response Plan provides for a County Emergency Operating Center at New Strawn. The purpose of the center is set forth at page 4.1-7 of the Applicants' Emergency Response Plan. It is not clear who is responsible for dealing with this center. However, in any event, at least one person from Coffey County must be available to coordinate the activities at the center with the County Emergency Office located at the Coffey County Courthouse and to work with other county personnel. This means that one person must be available for each 8 hour shift. Therefore, 3 people will be required.

Interrogatory 13. Your response number 13 to Interrogatory EP-5 states that 6 people are required for Coffey County to provide security for the Coffey County Courthouse in the event of an emergency. Explain in detail how you determined that 6 people were required to carry out this function and provide all assumptions on which this explanation is based.

Answer: One person will be required to protect the front entrance to the courthouse, and a second person will be required to provide security for the back entrance to the courthouse. There will be 3 eight hour shifts, so 6 people are required.

Interrogatory 14. Your response number 14 to Interrogatory EP-5 states that 9 people (in addition to 5 available Dispatchers) are required for Coffey County to provide adequate dispatchers to handle communications. Explain in detail how you determined that 9 additional people were required to carry out this function and provide all assumptions on which this explanation is based.

Answer: I stated that 9 people will be required and that 5 are available to handle communications. Therefore, 4 additional people will be required. The dispatcher will be one of the busiest persons in Coffey County in time of emergency. Two people will be needed to accept incoming calls and one person will be required to deliver messages, record calls and provide relief for the other 2 dispatchers. Three people will be on duty for each 8 hour shift. Therefore, 9 people will be required.

Interrogatory 15. Your response number 15 to Interrogatory EP-5 states that 34 people (in addition to 22 available Road and Bridge Crew members) are required for Coffey County to clear and sand evacuation routes in the event of snow and adverse weather. Explain in detail how you determined that 34 additional people were required to carry out this function and provide all assumptions on which this explanation is based.

Answer: I did not say 34 additional people will be required. A total of 34 are required, and 22 are already available on the Road and Bridge Crew. I determined that 16 blades are available and that one person is needed for handling each blade. There are 9 sand trucks available, and each requires 2 men to operate it. Therefore, a total of 34 people are required. Certainly, many more blades and trucks would be needed, but if equipment is not available there is no need for additional personnel. The estimate is based on the equipment that is available.

Interrogatory 16. Your response number 16 to Interrogatory EP-5 states that 15 people are required for Coffey County to assist with evacuation of nursing homes.

- a. Identify all nursing homes within the plume exposure pathway Emergency Planning Zone (of) the Wolf Creek facility which would be evacuated.
- b. Explain in detail how you determined that 15 people were required to carry out this function and provide all assumptions on which this explanation is based.

Answer:

There are 2 nursing homes. One at Waverly, and one at Burlington. The home at Waverly is included even though it is just outside the ten mile limit. The people who operate the nursing homes are skeptical about whether their people will report for work if there is an emergency. There are 50 people at the Waverly home, and 100 people at the Burlington home. The employees at each of the homes will be involved in getting medication and records and making arrangements for the people to go. Ten people will be required for the actual evacuation of the people from each home. This is in addition to the regular employees at the home. The original estimate of 15 people specified in response number 16 to Interrogatory EP-5 has been revised to 20.

- Interrogatory 17. Your response number 1 to Interrogatory EP-12 states that the fire departments of the City of Burlington and other cities in Coffey County do not have "sufficient radiation monitoring equipment that will detect radiation".
- a. Identify each of the other cities in Coffey County to which you refer.
 - b. Explain in detail why the fire departments need radiation monitoring equipment.
 - c. Identify any statute, regulation or regulatory guidance on which your answer to b. above is based.
 - d. Specify the type and number of pieces of equipment now available, the type and number of additional pieces of equipment which you believe are required, and provide all assumptions on which your answers are based.

Answer:

- a. LeRoy, Lebo, Waverly, Gridley, New Strawn.
- b. They will be handling decontamination and will only decontaminate when it is shown to be necessary by radiation monitoring equipment. Also they may be called to handle fires where there could be radiation.
- c. The Coffey County plan shows that this will be firemen's duties.
- d. Fifty radiation monitors are needed. The present monitors are not sensitive enough to detect low level radiation.

Interrogatory 18. Your response number 1 to Interrogatory EP-12 states that the fire departments of the City of Burlington and other cities in Coffey County "do not have five tank trucks for use at decontamination stations".

- a. Explain why tank trucks (as opposed to other types of equipment) are required.
- b. Explain in detail how you determined that five tank trucks are required and provide all assumptions on which this explanation is based.

Answer:

- a. Decontamination will be done by washing contaminated vehicles. This takes a very substantial amount of water. The tanks on present trucks are not large enough to do this.
- b. Figure 3-5 of the Coffey County Emergency Plan shows that there are 5 decontamination points. One truck is required at each point.

Interrogatory 19. Your response number 1 to Interrogatory EP-12 states that the fire departments of the City of Burlington and other cities in Coffey County "do not have radio equipment which is needed to communicate with the sheriff's office".

- a. Explain why the fire departments need to communicate with the Sheriff's Department.
- b. Specify the type and number of pieces of radio equipment now available, the type and number of additional pieces of equipment which you believe are required, and provide all assumptions on which your answers are based.

Answer:

- a. Fire departments need to have communication to relay messages to the Emergency Center Headquarters, which is the Sheriff's Office. Also, they need to be able to receive instructions from the Headquarters.
- b. Some city fire departments have citizens band radios. Others have nothing. Citizens band radios do not work well in Coffey County because too many people have them. I do not know the exact type of equipment that is required, but certainly additional and improved equipment for radio communications is absolutely necessary. The present equipment does not have enough power and there is apparently a "dead spot" close to the plant that the Sheriff indicates he cannot communicate with or around. During recent storms, the radios of the Burlington Police officers had too much interference to be of any use.

- Interrogatory 20. Your response number 2 to Interrogatory EP-12 states that 57 vehicles with loud speakers and 3500 tone alerts for homes are needed in order to provide for proper notification and communication.
- a. Explain why tone alerts for each home are needed in view of the proposed installation of a siren system and provide all assumptions on which this explanation is based.
 - b. Identify any statute, regulation, or regulatory guidance which requires installation of tone alerts in each home.
 - c. Explain in detail how you determined that 3500 tone alerts were required and provide all assumptions on which this explanation is based.
 - d. Explain in detail how you determined that 57 vehicles with loud speakers were required and provide all assumptions on which this explanation is based.

- Answer:
- a. Based upon my experience of living in the area for the past 11 years and with the Wolf Creek sirens blowing quite often for several years, it is not possible for people inside a building to hear the sirens unless the wind is blowing in the right direction and the windows are open and no television or other similar noise is in the building. People in the community indicate that they do not hear the sirens if they are in an enclosed building. The sirens are not adequate to warn people who are inside a building.
 - b. There is no statute, regulation, or regulatory guidance that requires tone alerts. However, the regulations do

provide that the method of notification must be such that the people will be alerted.

- c. According to Table 3-6 of the Coffey County Plan, there are 3,573 homes in the county. Each home should have a tone alert. We feel that all homes in the county should be provided with this kind of alert. The Coffey County Plan covers the whole county and not just the 10 mile emergency planning zone.
- d. The method for calculating how I determined that 57 vehicles with loud speakers are required is set forth above in my answer to Interrogatory 2.

Interrogatory 21. Your response number 3 to Interrogatory EP-12 states that twenty sirens are needed to warn people in the event of an emergency. Explain in detail how you determined that twenty sirens are required and provide all assumptions on which this explanation is based.

Answer: Two sirens each are needed for the towns of LeRoy, Gridley, Waverly, Lebo, and New Strawn. The present sirens at those locations are not adequate. I have assumed that two are needed for each of the cities in order to provide adequate coverage. This will permit them to be spaced at close intervals so that there can be sufficient warning. Additionally, the Coffey County plan shows that there are five siren locations. I believe that twice as many are required if there is to be adequate coverage of the emergency planning zone. Therefore, ten

are needed for the emergency planning zone and ten are needed for the cities mentioned. This totals twenty.

Interrogatory 22. Your response number 4 to Interrogatory EP-12 states that 66 barriers are needed to control entry to the ten mile EPZ. Explain in detail how you determined that 66 barriers were needed and provide all assumptions on which this explanation is based.

Answer. Figure 3-5 of the Coffey County Plan shows 66 roadblocks will be required. Therefore, 66 barriers will be required.

Interrogatory 23. Your response number 5 to Interrogatory EP-12 states that if the communications frequency is changed, the Coffey County Ambulance Department will need radio equipment to communicate with the Sheriff's office and others.

- a. Is it your belief that the communications frequency will be changed?
- b. If that is your belief, explain in detail the basis for this belief.

Answer: The Coffey County Sheriff has asked for a change in frequency. He states that he needs more power on his radios. The Sheriff cannot talk with the security personnel at the plant at the present time because of problems with the existing communications frequencies. All ambulance contact is through the Sheriff's office.

Interrogatory 24. Your response number 6 to Interrogatory EP-12 states that ten litters will be needed to evacuate the Sunset Manor Nursing Home and twenty litters to evacuate the Golden Age Lodge Nursing Home. Explain in detail how you determined that ten and twenty litters, respectively, were required to evacuate these nursing homes and provide all assumptions on which this explanation is based.

Answer: Golden Age Lodge Nursing Home is a 100 bed nursing home. Eighty percent of its patients are ambulatory. Therefore, twenty litters will be required for the non-ambulatory patients. Sunset Manor Nursing Home is a 50 bed home. Ten litters will be required for the twenty percent of its patients who are non-ambulatory. This information was received from talking with workers at the nursing homes.

Interrogatory 25. Your response number 6 to Interrogatory EP-12 states that two litter buses will be required for evacuation of nursing homes.

- a. Explain why litter buses (as opposed to other types of equipment) are required.
- b. Explain in detail how you determined that two litter buses were needed and provide all assumptions on which this explanation is based.

Answer: a. Ambulatory patients can ride in buses or other types of transportation. The buses for the non ambulatory

patients must have enough space for the number of patients specified in my response to Interrogatory 24.

The hospital ambulances must be allocated to the hospital to handle people who might be injured. Some form of enclosed transportation that will fit the litters is essential for the non-ambulatory patients.

- b. Two litter buses are a minimum. Thirty non-ambulatory patients must be evacuated. At least one must be available for each nursing home.

Interrogatory 26. Your response number 7 to Interrogatory EP-12 states that the Coffey County Radiation Monitoring Team does not have "proper radiation monitoring equipment to monitor radiation in the event of an evacuation".

- a. Describe the type of radiation monitoring equipment which is "proper".
- b. Identify any statute, regulation, or regulatory guidance on which your answer to a. above is based.
- c. Explain in detail why the type of radiation monitoring equipment identified in your response to a. above is needed.
- d. Specify the quantity of radiation monitoring equipment which the Radiation Monitoring Team now has available, the quantity of additional equipment which you assert it should have, explain in detail how you determined this quantity and provide all assumptions on which this explanation is based.

Answer:

- a. The proper radiation equipment is equipment capable of monitoring low level radiation and also alpha and beta rays, and perhaps other types of radiation.
- b. NUREG 0654, pages 14-15, describe the type of radioactivity releases that must be monitored.
- c. The monitoring team members will need the equipment to detect radiation as they check at hospitals, roadblocks, and within effected areas of Coffey County.
- d. The Coffey County Radiation Monitoring Team (2 people) only has instruments which can be used to detect high level gamma radiation. It should have enough equipment for the team to do the work outlined in the answers to Interrogatory 6.

Interrogatory 27.

Your response number 7 to Interrogatory EP-12 states that the Coffey County Radiation Monitoring Team "should be equipped with portable communications equipment for contacting others involved in an emergency or an evacuation process. Communications equipment for 18 people is required".

- a. Specify the type and number of pieces of communications equipment now available, the type and number of additional pieces of equipment which you believe are required, and provide all assumptions on which your answers are based.
- b. Identify specifically the "others involved in an emergency or an evacuation process" with whom you assert the Monitoring Team would need to communicate.
- c. Explain in detail why the type of communications equipment identified in your response to a. above is needed.

- d. Explain in detail how you determined that communications equipment for 18 people would be required, and provide all assumptions on which this explanation is based.

Answer:

- a. At the present time no communications equipment is available. It is not possible to be precise about the type of communications equipment that is needed until it is known the type of communications equipment that will be used by other personnel involved in dealing with an emergency. The Radiation Monitoring Team will need equipment which will permit it to communicate with the personnel at the Coffey County Courthouse or the Emergency Operations Center.
- b. The Monitoring Team will need to keep in touch with the Radiological Defense Officer, the plant site, and the Emergency Operations Center.
- c. The communications equipment is needed in order to permit the team members to communicate with other people about radiation "hot spots". It is a distinct possibility that telephones or other forms of communication normally used might not be available.
- d. Equipment for 15 people, not 18, is required. A set must be available to each person on the 3 shifts described in the answer to Interrogatory 6.

Interrogatory 28. Your response number 8 to Interrogatory EP-12 states that 350 workers will be involved in the evacuation plan who will need protective gear against radiation.

- a. Explain in detail how you determined that 350 workers would be involved and provide all assumptions on which this explanation is based.
- b. Describe the type of protective gear which you believe is required, explain in detail why such gear is required, and provide all assumptions on which this explanation is based.

Answer:

- a. The total number of people listed in my response to Interrogatory EP-5 is 521. Sixteen of these are duplicates. Therefore, 505 total people are involved. The number of 350 originally set forth in my answer to Interrogatory EP-12 was a conservative estimate. It is more likely that about 500 people will be involved.
- b. The Coffey County sheriff believes that the following equipment is needed for each person: coveralls, head and foot covers, gloves, gas mask (with capability to drink and communicate), dosimeter, and film badge. The equipment must be disposable and able to protect against all types of radiation that might be encountered.

Interrogatory 29. Your response to Interrogatories EP-15 and EP-16 specify the amount of additional funds which you contend are necessary for successful implementation of evacuation plans by Coffey County and the Kansas Emergency Preparedness Office, and the items which these additional amounts should be used to fund. Explain in detail how each of the additional amounts

specified in your response to Interrogatory EP-16 was determined and provide all assumptions on which this explanation is based.

Answer:

- a. The estimated cost for fire trucks represents 5 tank trucks at a cost of \$20,000.00 each. This appears to be a very minimal amount, and it will probably be greater.
- b. Loud speakers for warning cars. I estimated that these will be needed for 57 vehicles at a cost of \$200.00 each.
- c. Warning tone alerts for residences and businesses. There are 3,500 residences that will need alerts and the estimated cost per alert for each residence is \$30.00.
- d. Litter buses for nursing home evacuation. Two such buses will be required at a cost of \$12,500.00 each.
- e. Litters. Thirty litters will be required at a cost of \$50.00 each.
- f. Monitors (radiological). Fifty sets of monitors at a cost of \$500.00 each will be needed.
- g. Road barriers for roadblocks. Forty-six additional barriers at a cost of \$100.00 each will be required.
- h. Protective gear. One hundred sixteen sets of gear at \$500.00 each. This is probably a low estimate. One hundred seventy sets may be required. A set is required for each person on a shift.
- i. Communications equipment. Fifty sets of communications equipment for the Sheriff, Road and Bridge Crew, Firemen, and Radiological Monitoring Team will be required. Each set will cost \$1,000.00.

- j. Sirens. Ten additional sirens will be required for the cities of LeRoy, Gridley, Waverly, Lebo, New Strawn, and Burlington. Each will cost at least \$2000.00. More sirens may be required. See Interrogatory 21.
- k. Annual maintenance of equipment. There must be maintenance of the equipment. This would probably cost at least \$10,000.00 per year. The amount shown is for 5 years. Of course, it will extend farther into the future than that.
- l. Training - initial. This is cost to be born by the Kansas Emergency Preparedness Office. I estimated that 3 people from that office will be required to work 6 months. Their compensation will be \$1500.00 per month.
- m. Training - annual. This is for the training of 300 people. The training in subsequent years will be less than the training initially. This is for salaries of people from the Kansas Emergency Preparedness Office for the first 5 years.
- n. Compensation - emergency. This represents salary for 300 people for 5 days at \$50.00 each. This is the compensation to be paid to them for being involved in the emergency process.
- o. Compensation - training. This represents the cost of training over a 5 year period. This is the compensation paid during training exercises to 300 people for one day at a time at \$50.00 per day. It is an annual expense of \$15,000.00.

Interrogatory 30. Your response to Interrogatory EP-17 states that the evacuation plan(s) are rendered unworkable by "too much reliance on utility company personnel".

- a. Identify all functions presently assigned to utility company personnel which you assert should be assigned to utility company personnel.
- b. With respect to each function identified in your response to a. above, explain why reliance should not be placed on utility company personnel to perform that function.

Answer: The attitude of KGE is misleading. It indicates that certain personnel really will not be needed. For example, firemen have been told they are not likely to be needed because they are backup. KGE has also indicated that much protective equipment will not be needed.

Interrogatory 31. Your response to Interrogatory EP-17 states that "(n)ot enough consideration has been given to adverse weather conditions".

- a. Identify each aspect of evacuation planning as to which you contend inadequate consideration has been given to adverse weather conditions.
- b. With respect to each aspect of evacuation planning identified in your response to a. above, describe the adverse weather conditions which you assert have been inadequately considered.
- c. With respect to each aspect of evacuation planning identified in your response to a. above, explain why

adverse weather conditions should be considered and how greater consideration should be given to such conditions.

Answer:

- a. Not enough consideration has been given to transporting people out of the county during icy or snow-bound conditions.
- b. More consideration must be given to evacuation at times when roads are icy or there is a substantial amount of snow on the roads.
- c. Adverse weather conditions need to be considered because it will take longer to evacuate people during those times. This means that more equipment must be made available to clear the roads at the time of an evacuation.

Interrogatory 32. With respect to each of your answers to Interrogatories 1 through 31 above, answer General Interrogatories 1 through 4.

Answer:

1. My answers to the above interrogatories are based, in part, on NUREG 0654, the Coffey County Contingency Plan for Incidents Involving Commercial Nuclear Power, dated November, 1981. I have indicated above how I have used these documents in providing my answers.
2. Answer of Wanda Christy. My answers are based, in part, upon calculations that I have done and are based, in part, upon my experience as the former acting Coffey County Emergency Preparedness Director.

2. Answer of Mary Ellen Salava. My answers are, in part, based on work I did to help prepare and develop a Coffey County emergency plan in 1978-1979.
3. My answer is based upon research that I have done. It has involved reviewing newspapers, current periodicals, and the documents listed above.
4. My answer is, in some part, based upon conversations and contacts with other individuals. These individuals are set forth in my answer to the Applicants' First Set of Interrogatories. That answer is dated September 24, 1981.

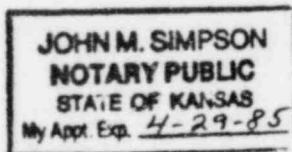
The answers set forth above on pages 1 to 28 are based on the information available to us at this time. If further information becomes available to us, we reserve the right to supplement or amend these answers, to do so will supplement or amend these answers. Signed this 30th day of June, 1982.

Wanda Christy
Wanda Christy

Mary Ellen Salava
Mary Ellen Salava

STATE OF KANSAS, COUNTY OF JOHNSON:

On this 30th day of June, 1982, Wanda Christy and Mary Ellen Salava appeared before me and being first duly sworn made and signed the above answers under oath.



John M. Simpson
Notary Public

(Seal)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

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

CERTIFICATE OF SERVICE

This is to certify that copies of "Joint Answers of Intervenor Christy and Salava to Applicants' Second Set of Interrogatories to Intervenor Christy and Salava" in the above captioned proceeding have been served on the following by deposit in the U.S. Mail, first class, on July 1, 1982.

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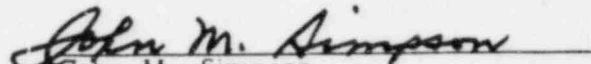
PAGE 2 OF CERTIFICATE OF SERVICE

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