



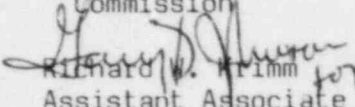
# Federal Emergency Management Agency

Washington, D.C. 20472

9 SEP 1982

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MEMORANDUM FOR: Brian K. Grimes  
Director, Division of  
Emergency Preparedness  
U.S. Nuclear Regulatory  
Commission

FROM:   
Richard W. Grimm  
Assistant Associate Director  
Office of Natural and Technological  
Hazards

SUBJECT: Response to Interrogatories on the Cleveland Electric Illuminating  
Company (Perry Nuclear Power Plant, Units 1 and 2)

Attached are responses to interrogatories from the Sunflower Alliance which were transmitted to us informally by Mr. Richard VanNiel of your staff on the Perry Nuclear Power Plant, Units 1 and 2. These responses are from our Region V staff and address the interrogatories which were identified as requiring a Federal Emergency Management Agency response in telephone conversations between Richard VanNiel and Marshall Sanders.

Also, for your information, I am attaching responses from Mr. James R. Williams, Nuclear Preparedness Officer, State of Ohio, and the Lake County Commissioners, which address some of the Sunflower Alliance interrogatories. These might be of some use in preparing the Nuclear Regulatory Commission staff responses.

Attachments



# Federal Emergency Management Agency

Region V 300 South Wacker, 24th Floor, Chicago, IL 60606 (312) 353-1500

Mailing address: Federal Center, Battle Creek, Michigan 49016

August 19, 1982

MEMORANDUM FOR: Marshall Sanders, Chief  
Program Development Branch, SL-NT

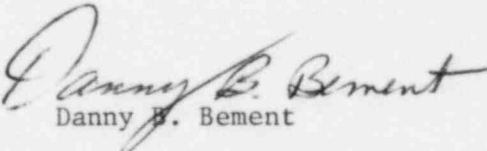
FROM: Dan Bement, Acting Chief  
Technological Hazards Branch

SUBJECT: Perry Nuclear Power Plant Interrogatories

Attached are FEMA Region V's comments on the Perry Nuclear Power Plant interrogatories, requested by the Nuclear Regulatory Commission.

Also attached is correspondence from the State of Ohio and Lake County for your information and use.

Please feel free to contact me if I can be of any further assistance.

  
Danny B. Bement

Attachments

REGION V  
COMMENTS ON INTERROGATORIES REQUESTED BY  
THE NUCLEAR REGULATORY COMMISSION

Q 44 Has any consideration been made of the possibility of the voluntary and spontaneous evacuation of persons within the plume exposure pathway EPZ in the event of an accident at Perry Nuclear Power Plant and how this might affect the ordered evacuation? If so, describe in detail any such study.

A Experience at TMI shows the possibility exists of the voluntary and spontaneous evacuation of persons within the plume exposure pathway (EPZ) in the event of an accident at a nuclear power plant. This experience, as well as spontaneous evacuation during wartime overseas, has been brought to the attention of State and local radiological emergency preparedness planners. Lake County's response to this interrogatory indicates that consideration is being made of the possibility of a voluntary and spontaneous evacuation of persons within the plume exposure pathway (EPZ) in the event of an accident at the Perry Nuclear Power Plant.

Lake County's reply indicates "the county plan will provide for traffic control, perimeter control, and public information to deal with such voluntary and spontaneous evacuation." Consequently, any voluntary and spontaneous evacuation of persons within the plume exposure pathway EPZ would have minimal effect on the ordered evacuation. Full documentation to support this response is not available until FEMA Region V and the Regional Assistance Committee has an opportunity to review the site specific, offsite plans in support of the Perry Nuclear Power Plant. These plans are in process of being developed at this time.

Q 45 Has consideration been made of the possibility of the voluntary and spontaneous evacuation of persons outside of the plume exposure EPZ in the event of an accident at Perry Nuclear Power Plant and how this might affect the ordered evacuation, especially the support organization and facilities outside the EPZ? If so, describe in detail any such study.

A This interrogatory has been adequately answered by the Nuclear Regulatory Commission in its response to interrogatory Number 43. Lake County, in response to the NRC, has stated, "Voluntary and Spontaneous evacuation of persons outside the plume exposure pathway has no significant impact as noted in the evacuation time study report."

Q 46 In the staff's opinion, are there adequate facilities to shelter simultaneously the total permanent and peak seasonal and transient populations in each of the following areas?

- a. The area designated by the applicant in the FSAR as the plume exposure pathway.

- b. The area which the staff believes should comprise the plume exposure pathway EPZ.
- c. The circular zone surrounding Perry Nuclear Power Plant having a 20-mile radius.

With respect to each of these areas, describe the types of shelter available, indicate the number of each type of shelter available and the shielding factor associated with each type, describe the nature and location of the shelter to be used by transient populations, and disclose any assumption made as to an acceptable level of risk to the public.

A FEMA has been requested to respond with respect to the types of in-place shelter in the area. Since the local plans are not completed, FEMA is not in a position to respond to this interrogatory with specifics as it relates to the offsite planning for the Perry Nuclear Power Plant. The interrogatory does not make a distinction between evacuation and shelter in-place. If shelter in-place is the recommended PAG, then the permanent population would be able to use their residences as shelter. Transients and seasonal population without adequate shelter would likely be told to evacuate rather than shelter.

Full documentation to support this response (particularly in case of an ordered evacuation) is not available until FEMA Region V and the Regional Assistance Committee have an opportunity to review the site specific, offsite plans in support of the Perry Nuclear Power Plant. These plans are in the process of being developed at this time.

Q 49 In the staff's opinion, what constitutes an appropriate and safe distance from the Perry Nuclear Power Plant for the location of reception/mass care centers for evacuees? Describe any other criteria for the location of reception/mass care centers.

A FEMA, as does the Nuclear Regulatory Commission, relies on NUREG 0654/FEMA REP-1, Revision 1. Criterion J.10.h. of this document states relocation centers should be at least 5 miles and preferably 10 miles beyond the boundary of the plume exposure pathway EPZ. This translates normally to be a distance of at least 15 to 20 miles from the Perry Nuclear Power Plant.

Q 57 What provisions have been made to ensure the cooperation of the public during a radiation emergency? Specifically, what authority do State and local governments have to force people to evacuate from their homes, to prevent spontaneous evacuation outside the EPZ (and possibly in the area of the reception/mass care centers), to compel the assistance of volunteers in the evacuation, and to control panic and subsequent uncooperative behavior in evacuees?

A Full documentation to reply to this interrogatory is not possible until FEMA Region V and the Regional Assistance Committee have an opportunity to review the site specific, offsite radiological emergency preparedness

plans for the Perry Nuclear Power Plant. These plans are in process of being developed at this time.

NUREG 0654/FEMA REP-1, Revision 1, Planning Standards and Criteria E, Notification Methods and Procedures, and G, Public Education and Information are used by State and local officials in developing provisions to ensure the cooperation of the public during a radiation emergency. A basic assumption of these NUREG planning standards is people will cooperate and be less likely to panic if they are informed adequately and in a timely manner. A more detailed response can be provided at a later date. This interrogatory should also be addressed by the State of Ohio as well as Ashtabula, Geauga and Lake Counties. Letter dated January 8, 1982 (Items 10, 12, and 18) to James Keener, Cleveland Electric Illuminating Company does provide some State response regarding this interrogatory.

Q 58 In the staff's opinion, might a nuclear emergency occurring at Perry Nuclear Power Plant ever require the imposition of martial law? If so, what areas around the site might be so affected and for how long?

A FEMA Region V can provide a response at a later date after it has an opportunity to review State and local site specific, offsite radiological emergency plans for the Perry Nuclear Power Plant. These plans are currently being developed.

Martial law is basically a last resort, wartime option used when civil government in the United States is no longer viable. It does not appear logical that martial law would be used during a nuclear emergency at the Perry Nuclear Power Plant since civil governments would be viable and responsible for the health and safety of the people.

Q 62 Describe in detail any independent monitoring for radiation around the Perry Nuclear Power Plant site. (Independent monitoring here means monitoring by a governmental or private entity that is not an agent of the applicant.) Include the types of monitors to be used, both mobile and stationary and detection/manufacture type, manner and frequency of reading/analysis, availability of instantaneous data, type of data link with the responsible agency, name and affiliation of responsible agency, type of meteorological monitors/data input, if any, means of calculating projected doses, and the source of funding of the responsible agency.

A Full documentation to reply to this interrogatory is not possible. FEMA Region V and the Regional Assistance Committee have an opportunity to review site specific, offsite radiological emergency preparedness plans for the Perry Nuclear Power Plant. It would be appropriate for the State of Ohio and the Counties of Ashtabula, Geauga, and Lake to reply to this interrogatory since these site specific offsite plans are now in process of being developed. The State of Ohio will deploy radiation monitoring field teams in the event of any nuclear power plant emergency, including the Perry Nuclear Power Plant. Additional information requested in this interrogatory can be found in the Ohio Radiological Emergency Response Plan. Lake County correspondence indicates the county is

planning to install and operate an independent alert monitoring system consisting of stations throughout the county with: (1) radiation detectors of the Reuter-Stokes type, SENTRI 1011 or equivalent, (2) high volume air samplers, and (3) meteorological monitors. Lake County correspondence to the NRC concerning this issue is attached for information. State of Ohio correspondence to the Cleveland Electric Illuminating Company is also attached for information.

Attachments



*Handwritten notes:*  
Hilco  
Bureau

STATE OF OHIO  
ADJUTANT GENERAL'S DEPARTMENT

2825 WEST GRANVILLE ROAD  
WORTHINGTON, OHIO 43085

JAMES A. RHODES  
GOVERNOR

*Large handwritten stamp:* COPY

JAMES C. CLEM  
MAJOR GENERAL  
THE ADJUTANT GENERAL

DISASTER SERVICES AGENCY

AGOH-DS-NPO

JANUARY 8, 1982

Cleveland Electric Illuminating Co.  
Attn: William J. Kerner  
Post Office Box 5000  
Cleveland, Ohio 44101

*Vertical stamp:*  
JAN 10 1982

Dear Mr. Kerner:

Enclosed are the comments on the interrogatories submitted to CEI by the Sunflower Alliance.

As we discussed in our conference call Wednesday, January 6, 1982, I hope this will be of some use to you as you prepare your reply.

If we can be of any further assistance, please contact us.

Sincerely,

*Handwritten signature:* James R. Williams  
JAMES R. WILLIAMS  
Nuclear Preparedness Officer

Encl.

JRW:liv



COMMENTS ON INTERROGATORIES PRESENTED TO THE CLEVELAND ELECTRIC ILLUMINATING COMPANY  
BY THE SUNFLOWER ALLIANCE ON EMERGENCY PLANNING ISSUES

The issue addressed by the Sunflower Alliance on emergency planning is not appropriate as a matter of contention. The first paragraph of the interrogatories entitle Issue 1, states that "Applicant's emergency evacuation plans do not demonstrate---". In this issue, in this case, the applicants do not have to demonstrate that offsite emergency plans are in effect or have been completed. The applicants need only prepare an emergency plan for the nuclear power station in the area inside the fence line. The offsite emergency plans are a function of government, and may be prepared either by state/local government or a contractor paid for by the applicant. Therefore, the title of the issue is really not appropriate and should not be addressed to CEI.

The statement of purpose for the interrogatories sets forth to discover whether the applicant has plans that will provide adequate protective measures in the event of an emergency. The applicant's planning, in this case, is specifically related to the onsite plans, and the station emergency plans, and needs only show the interface between those station plans and the offsite emergency plan developed by government. The interrogatories, to discover this information, to be used in hearings, are commented upon in the following paragraphs. The numbered paragraphs relate to the paragraph numbers identified by the intervenor.

1. The plume exposure pathway EPZ has been established first by scribing a circle with a radius of ten miles around the nuclear power station. Concentric circles within the ten mile area have also been identified at two and five miles radius from the plant. The ingestion EPZ has been established by scribing a circle 50 miles radius around the nuclear power station. These circles were drawn on a map, and were then adjusted to coincide with political boundaries for ease of identification with population groups, and to enhance the implementation of protective actions. A requirement exists only to establish these zones, which may be adjusted by governmental officials preparing emergency response plans based upon the manner in which government feels necessary to implement protective actions and to identify areas at risk. At this point, the offsite emergency plans are being developed. Jurisdictional boundaries are primarily being considered rather than the topography which can't be changed. Considerations are made for the land characteristics as far as land use over which government has little control and for the demography, mainly numbers of population and populations groups which are in the plume exposure EPZ. There is no attempt to deal with land or land use characteristics in the 50 mile zone as this is a functional responsibility of the state. The EPZ's were established for Perry by government officials. The area can be identified on a standard roadmap utilizing the scale of miles and preparing the described arcs for any use by the intervenors.
2. The nuclear power station operator should describe the method to determine the time duration of releases, and generally, how the time duration affects the recommendation to local officials of protective actions. It is not the responsibility of the nuclear power station operator (the applicant) to explain fully how offsite emergency radiological response plans for Perry take into account the parameters for



the duration of the release. These plans are under development now, and when developed, a thorough dose assessment technique unique to the Perry Nuclear Power Station will be developed.

3. The plans for the offsite emergency response for Ashtabula, Geauga and Lake Counties are being prepared at this time. They are being prepared by the PRC Vorhees Co. for each county. PRC Vorhees is coordinating with state government to insure that the county plans are in concert with the State of Ohio Radiological Emergency Response Plan (RERP), which has been evaluated by the Federal Emergency Management Agency, and is in the process for approval at this time. The plans will call for the necessary mutual support, hosting of risk populations, plan development preparedness, training and functional coordination at the Emergency Offsite Facility for representatives of all governments involved. Full documentation to support the response is not available at this time because the plans are just now being developed.
4. The intervenor's attention is directed to the Federal Register Notice published Dec. 23, 1980, Federal Register Volume 45, number 248, page 84910. The Federal Emergency Management Agency, in the referenced document, provides the National Radiological Emergency Response Preparedness Plan for nuclear power plants commonly known as The Master Plan. This federal government Master Plan describes the role of the various federal agencies; namely, the Department of Energy, Federal Emergency Management Agency, U.S. EPA and the Department of Health and Human Services. The utility, of course, has a functional contact with the Nuclear Regulatory Commission, and has the necessary contacts to make in the event of an emergency at the power station. Government, on the other hand, contacts the other federal agencies unless these agencies are brought to bear by the NRC. It is, therefore, not proper for the applicant to describe the interface with the Department of Energy, U.S. EPA, or Health and Human Services, as these agencies will be called in to help in the offsite activity by government not by the applicant.
5. The State of Ohio Radiological Emergency Response Plan has been tested twice, and evaluated by the Federal Emergency Management Agency within the requirements of NUREG 0654. In each case, the plan was found to be adequate to provide for the protection of the public health and safety. As previously stated, the offsite emergency response plans for Lake, Ashtabula and Geauga Counties are in the process of being prepared, and will be in concert with the state plan, and will be tested to insure that the fundamentals of public health and safety are both in the plan and can be implemented.
6. CEI can provide only those letters of agreement with agencies for onsite reaction to the Perry Nuclear Power Station. A section in each county plan is devoted to letters of agreement for agencies and individuals with an emergency response role in an offsite plan. Generally, the letters

of agreement will simply stipulate that the functions, responsibilities and tasks outlined in the plan can be accomplished, and do not deal in the methods or procedures unique to that agency. In many cases, letters of agreement are not needed because duly constituted government agencies are responding to functions and tasks in the plan that are normal duty roles for that governmental agency. In other cases, the plan is very explanatory as to the role played by an given agency participating in the response. It is appropriate here that CEI make a statement as to the costs for developing emergency plans for government.

7. Paragraph 7 requires an opinion on the part of the utility and a conclusion after researching the documents. This opinion will be indicated in Parts B, C and D. However, in C, the information by position and numbers of personnel who are volunteers is not available to the utility, and in past cases of intervention hearings for nuclear power stations, this data is so fluctuating for a volunteer basis, it has generally not been admissible as a consideration. In A, B, C and D, it is only appropriate for the utility to deal with matters of volunteer response to situations involving those agencies who would respond directly onsite to problems at the power station, and with whom the power station has an agreement. Reliance on offsite agencies for emergency response in the offsite plan is not a function of the utility, and will be a part of the emergency response plans when developed.
8. The state plan and the other county plans have initiating conditions set forth and related actions to be taken. At this time, there is no reason to believe that a deviation will occur in any of the offsite emergency plans for the Perry Nuclear Power Station in developing initiating conditions and appropriate responses. For the initiating conditions other than those specified in NUREG 0654, the utility or CEI should address this portion of the interrogatory and specifically should reference the Federal Register of 15 December, 1981, which proposes a rule that would increase the reportable significant events to the NRC Operations Center.
9. This interrogatory should be addressed by the utility as it requires providing operating procedures to the intervenor if appropriate.
10. The State of Ohio Radiological Emergency Response Plan provides details on the information to be provided to the general public in the EPZ. Specifically, this calls for a recommendation of protective action by the utility to local government officials and to the State of Ohio. The state is required to make an independent assessment of the conditions, and make a separate recommendation to local government. Local government officials will then consider the recommendations made by the utility and the state, and if a protective action is warranted, will notify the people by the utilization of an outdoor warning siren system or any other combination of audible signals whether they be in-home radios, tone alert radios or other outdoor warning devices. Once the decision

to initiate protective action and outdoor warning is reached, notification of the emergency broadcast system by government officials with a prepared message on protective action will be made. This recording will then be played over radio and television in the area coverage for the emergency planning zone, and where the protective action, if any, is to be implemented. Additionally, a requirement exists for a door-to-door check on persons to insure that they have received such notification and if not notified, to follow up and make the notification required. All of these procedures will be set forth in the offsite emergency plans for Lake, Ashtabula and Geauga Counties, and as previously noted, are in the State of Ohio Radiological Emergency Response Plan.

11. The first sentence is not completed in this interrogatory; however, the interrogatory is interpreted to mean that the administrative and physical means used to notify the public within the plume EPZ in fifteen minutes are to be outlined rather than demonstrated. According to the reference listed in the interrogatory, and the NRC policy of licensee's responsibility to demonstrate that means exist, it would be appropriate for CEI to describe both the siren study performed by Vorhees and the ultimate decision on sirens to be installed in the EPZ, along with the area of coverage. The part of the interrogatory dealing with successful operation of the warning system could be dealt with in that same explanation of the siren study and the decision on the type of sirens or outdoor warning devices to be employed. As far as authority to activate the system, and under what conditions, it can be stated that the duly constituted government is the only authority allowed to activate such a system, and the conditions would be those set forth in the emergency action levels or the emergency classification system requiring offsite protective action beyond the site area emergency wherein offsite reactions are required. The financial implications of this interrogatory of course need to be answered by CEI. The responsibility for testing of the system belongs to government, and in this case, primarily Lake County government. Maintenance of the system is a subject that, at this point, is not clear. Unless an agreement is established between CEI and the county for a maintenance program, it would appear that the county would then incur the maintenance task along with the necessary financial burden, and this could be covered under the Emergency Management Assistance funding through the State of Ohio, and through FEMA, if the siren system is included in the Nuclear Attack Warning System prescribed by FEMA under the National Warning Program.
12. The criteria contained in NUREG 0654, Planning Standard G, are relative to the ten mile PLUME EPZ and not the 50 mile INGESTION EPZ. The State of Ohio Radiological Emergency Response Plan establishes a type of newsletter to be used by the utility to convey information to the public living in the 10 mile EPZ, and to those transients who might find themselves in the 10 mile EPZ at the time of an emergency at the Perry Nuclear Power Station. Utilities are responsible for establishing such a newsletter or information document and distributing this document to the appropriate citizens or residents. Currently, the Toledo Edison

Company, operators of the Davis-Besse Power Station, distribute a nuclear newsletter which meets the criteria established in NUREG 0654. Cincinnati Gas & Electric is publishing a document entitled "Circle of Safety" which contains the same information; however, it takes a different approach in organization of the information as it is presented to the population of the ten mile EPZ, and will be made available for transients. The other criteria in this portion of NUREG 0654, that could be addressed in this interrogatory, are the following:

- A. Media contact will be made at the EOF as recommended both NUREG 0696, NUREG 0654 and Operational Planning Guidance from FEMA. The State of Ohio Radiological Emergency Response Plan calls for such an approach to the media, and indicates that the state public information officer, utility public information officer, county public information officers and federal agency information officers will be present at the EOF to coordinate all press releases and to provide timely information to the media for further relay to the public.
- B. News briefings will be conducted at the EOF as required during the early stages of the emergency, and at a schedule to be published as the situation develops into later stages.
- C. Media orientations are conducted annually. CEI will establish the first date for media orientation. There are recommended orientation dates in the State of Ohio RERP.

No written materials have been developed as of this date. The State of Ohio knows of no consultants other than the PRC Vorhees Co. which have been employed to develop any work in this area for CEI.

- 13. This interrogatory can only be answered by CEI.
- 14. This interrogatory can only be answered by CEI.
- 15. The dose projection methods for offsite agencies use have not yet been developed. These dose projection methods will be coordinated with CEI when development is begun both by the utility and by the state. All factors of meteorology and core inventory will be considered in the dose projection. A full dose assessment procedure will be developed by the State of Ohio and the utility to insure that accurate projections can be made to county governments involved, and that accurate updates of these projections can be made by the use of data measured in field survey activities.
- 16. The information required in this interrogatory can best be provided by obtaining the data from Lake County Memorial East Hospital. Part K of the Ohio Radiological Emergency Response Plan identifies hospitals

in the Perry Nuclear Power Station area for use by governmental agencies for planning purposes. Agreements between the utility and a hospital to accept patients injured or contaminated onsite are totally different than those agreements to handle patients who have been exposed to internal radiation offsite in the ten mile EPZ. The state plan and the local county plans will specifically outline the policy for handling patients who have received radiation injuries to internal organs in the areas in the 10 mile EPZ around the Perry Nuclear Power Station.

17. This item can only be answered by CEI.
18. Notification for the 50 mile ingestion EPZ will be handled through advisories from the state emergency operations center. The state Department of Health and state Department of Agriculture personnel responsible for implementing actions in the 50 mile EPZ, will work at the state emergency operations center, and will have the full-scope data necessary to make advisories and to implement protective actions as required in the 50 mile Ingestion EPZ. Generally, the system employed is that the officials responsible for implementing actions for the ingestion pathway will receive data from the state radiological assessment group. This data will be closely coordinated with the utility and the counties of Lake, Geauga and Ashtabula. When agricultural implications are apparent, advisories for protective action in a preventive measure will be undertaken as deemed appropriate by officials at the state level. Field agencies of the U. S. Dept. of Agriculture and the Ohio Dept. of Agriculture, as well as sample collection groups from the Ohio Environmental Protection Agency, will be utilized to insure that the appropriate protective actions have been taken, and that samples obtained are correctly evaluated to determine future courses of action in the 50 mile EPZ. Notification for implementation of protective actions would be made through advisories published at the state emergency operations center and broadcast generally over the media and published in the newspapers. County officials will be contacted by officials of the state government organizations to insure that the county has an effective follow-up and is aware of the impact of the actions to be taken in the 50 mile EPZ; however, it's generally not a responsibility of county government to implement those actions because they are taken on the foodchain, and the industry associated with foodchain, which is beyond the realm generally of county government. At this point, plans to test the system are not complete; however, it must be noted that the 50 mile ingestion pathway is addressed in each of the instances where a nuclear power plant exercise is conducted, and thus, has been tested at both the Davis-Besse Nuclear Power Station and the Zimmer Nuclear Power Station in Ohio.
19. As this interrogatory is specifically addressed to agreements entered into by CEI, it's appropriate that CEI make the answer as it affects any future plans for agreements.

20. This answer is best provided by CEI because the statement is made in the Perry Nuclear Power Station Emergency Plan.
21. This interrogatory can best be answered by CEI.
22. Since the emergency action levels described are in the Perry Nuclear Power Station Emergency Plan, it's appropriate that a discussion of these EAL's as specified in the interrogatory be provided by CEI.
23. This interrogatory can best be answered by CEI.
24. The offsite measuring groups referred to in Section 4.1.4 of the station emergency plan are the radiation monitor teams that are formed by the State of Ohio, and the local county governments. It is not the prerogative of CEI to measure the effectiveness and expertise of the offsite measuring groups. The offsite measuring teams from the State of Ohio have excellent qualifications as determined and reported by the Federal Emergency Management Agency Radiological Assistance Committee, Region V. Personnel on this committee are from the U. S. Dept. of Energy, U. S. EPA, U. S. NRC as well as FEMA. These radiological monitoring teams have provided Ohio with a high standard of expertise for radiological emergency response and radiation detection for some eleven years, and are well qualified to perform their functions. There are no agreements between the applicant and the offsite measuring groups as a requirement exists in NUREG 0654 for the state government to perform this function. State teams perform the function in the event of any nuclear power plant emergency, not specifically the Perry Nuclear Power Station, and any other radiological emergency that arises within the state of Ohio.
25. The positions described in this interrogatory apply specifically to CEI personnel; therefore, the state will not comment on this particular interrogatory.
26. This interrogatory is best responded to by CEI.
27. It is assumed that this interrogatory seeks to identify offsite organizations responding at the Perry Nuclear Power Plant in an onsite role. Ideally, then, the training provided to the local fire departments responding to an emergency at the Perry Nuclear Power Station and any agreements with security forces required to augment the existing security system at the Perry Nuclear Power Station, and finally the emergency squad or life squad that would respond to an emergency at the Perry Nuclear Power Station, should be set forth in some detail as to the conduct of the training, the content of the course and when training was given, or when it is scheduled to be given. The Ohio Disaster Services Agency provides radiological emergency response training to local law enforcement and local emergency service agencies. This training has been given in some limited amount in Lake County, and this training will be accelerated and intensified for emergency response groups in the offsite area around the Perry

Nuclear Power Station as time draws near for exercises and the licensing of the plant.

28. This interrogatory appears to convey a misunderstanding on the part of the intervenor that members of the public will be transported to the Radiation Medical Center Hospital in Philadelphia, Pennsylvania. In fact, only the utility workers at the Perry Nuclear Power Station, if suffering radiological injury, would be transported to the Philadelphia location. Members of the public, offsite in the area around the nuclear power station, if they have some type of internal radiation injury, would be treated in the local hospital system.
29. This interrogatory is best answered by CEI.
30. This interrogatory should be answered by CEI indicating the agreements existing between ambulance, fire and police services for response to onsite emergencies at the nuclear power station.
31. The answer to this interrogatory should be qualified to say that in-plant injuries to personnel would be subject to provisions and procedures of Radiation Management Corporation. Members of the public will be treated in the public sector. Therefore, CEI should explain any details of agreements that they have with Radiation Management Corporation to answer the interrogatory.
32. The information requested in this interrogatory can be specifically obtained from the Ohio Radiological Emergency Response Plan. All of the expectations identified in the referenced portion of the Perry Nuclear Power Station Emergency Plan in this interrogatory can be found in the Ohio Radiological Emergency Response Plan. A letter from the Cleveland Electric Illuminating Company to the State of Ohio, which will be put into the Ohio RERP, will cover all of the necessary agreements needed between state, civil agencies and county agencies and CEI. The training which state agencies have received for response to emergencies at Davis-Besse Nuclear Power Station and the Zimmer Nuclear Power Station is sufficient to provide a basis that they can respond to an emergency at the Perry Nuclear Power Station. These agencies have demonstrated, for federal evaluation, their ability to provide for the health and safety of the public around the nuclear power plant in two previous exercises. This ability will have to be demonstrated at the Perry Nuclear Power Station as a part of the preoperational inspection process prior to full operation of the plant. The applicant, CEI, will have to provide the communication links to the State of Ohio, EOC and local government in order to obtain response by these offsite agencies as required by NUREG 0654. A portion of the plan, currently being developed for Lake, Geauga and Ashtabula Counties, will identify these communication links and the communication links will have to be demonstrated in the exercise as aforementioned, prior to full licensing.

33. This interrogatory basically serves to show a misunderstanding on the part of the intervenor in the belief that Radiation Management Corporation must respond within fifteen minutes of the declaration of an emergency. The only requirement for fifteen minutes involves notification of local government that a certain emergency situation exists, within fifteen minutes of the determination of the emergency at the plant and the ability of local government to notify the population in the ten mile emergency planning zone within fifteen minutes after their notification that a protective action is warranted. Therefore, CEI does not have to respond that RMC will come to the aid and assistance of the facility within that fifteen minute time period.
  
34. Currently, the guidance from the Federal Emergency Management Agency to state planners and from the NRC to utility operators of nuclear power stations is that interface with planning provisions for Canada will be conducted at the federal level. This means that the Federal Emergency Management Agency, the Nuclear Regulatory Commission, the Dept. of Defense and the U. S. State Dept. are all working to involve the notification of the governments of Canada. In the case of the Perry Nuclear Power Station, where residents of Canada are within the 50 mile ingestion pathway, the notification for ingestion of products that might be potentially contaminated, would generally occur through the U. S. Dept. of Agriculture notification to the appropriate agencies in Canada. A plan is currently being developed by the Federal Emergency Management Agency to encompass all of the actions for interstate and international notification and should be available sometime in mid 1982.
  
35. Section II, Part I, of the Ohio Radiological Emergency Response Plan contains Figure II-I-2 which is the Director's Journal Entry established by the Director of the Ohio Dept. of Health. This journal entry specifies the maximum exposure level an offsite emergency worker could expose himself to doing any emergency work. Generally projected, the whole body gamma dose rate is 25 rem for activity other than lifesaving with a thyroid dose limit of 125 rem. For lifesaving procedures, 75 rem whole body gamma dose is the limit with no limit to the thyroid exposure. This same Order specifies activities of emergency workers in radiation areas where exposures might be incurred. A specific area of the county radiological emergency response plans for Lake, Ashtabula and Geauga Counties will also be devoted to the same reference in the state plan to provide guidance for local agencies who may be responding to incidents at the Perry Nuclear Power Station. Radiological emergency response training will be given, as previously noted in these interrogatories, to the emergency workers in the area who would be responding to situations within the 10 mile EPZ. This training generally consists of the 20-hour radiological emergency monitoring course for peacetime nuclear incidents, which provides the emergency services with the necessary training for self-protection and an accurate monitoring of radiation doses as they perform their emergency tasks.



36. This interrogatory is best answered by CEI inasmuch that it addresses the specifics of the emergency operations facility both in location and implementation.
37. This interrogatory needs to be answered by CEI as to their intent on assisting the counties in funding the development of emergency operation centers. In Ashtabula County, this process has already begun, and has been identified by both the county and CEI. Within Geauga County and Lake County, these parameters have begun to be addressed, but as of yet, have not been fully completed.
38. The communications network provided by CEI to both the state and county governments for notification and information purposes has to be fully planned, and should be explained by CEI. The state can only set forth its requirements at this time in that the data link from the power plant to the state emergency operations center will have to be in place as well as a dedicated direct voice line between the Control Room, Tech Support Center and EOF to the state emergency operations center radiological assessment room. Other communications within the counties will generally be determined by the content of the county's emergency response plans.
39. This interrogatory is best addressed by CEI inasmuch that the notification system has to be provided by CEI, and the information on installation must then come from the utility company.
40. Emergency communication systems are powered both by normal electrical service and by generator provided electricity. In the case of mobile handheld radios, vehicle power and batteries provide the communication systems power.
41. This interrogatory addresses specifics of the control room, which is best answered by CEI.
42. In-plant radiation exposure protection could only be addressed by CEI.

GENERAL SUMMARY: The foregoing comments on the interrogatories submitted by the Sunflower Alliance as an intervenor to the Perry Nuclear Power Station licensing process, indicate a general misunderstanding on the part of the intervenor as to the exact role of the applicant versus the role of the offsite agencies having responsibility for emergency response to a situation involving offsite implications from the power station. Many of the interrogatories are specifically addressed at the Perry Nuclear Power Station because of in-plant or onsite activities. Those interrogatories that deal with items in the developing plans, which are currently being developed for Lake, Ashtabula and Geauga Counties cannot fully be addressed at this time until such plans are completed; however, our best attempt to generalize on the thrust of those plans has been made. Information

provided above to the interrogatories can be used as best necessary to develop an answer that would satisfy the person seeking information. It appears that an information session or an orientation session with the Sunflower Alliance should be conducted to properly identify the roles of both the utility, the state and local government in the area of emergency planning to preclude further detailed interrogatories and to release both the government agencies and the utility from a time-consuming costly effort to answer these items which could be readily cleared up in the previously mentioned orientation sessions.

(FIRST SET)

R E S P O N S E S

To

Interrogatories Filed by  
Sunflower Alliance Pursuant to Previous Orders of  
the Atomic Safety and Licensing Board  
and 10 CFR 2.70 b

Lake County Commissioners  
Lake County Disaster Services Agency

Prepared for  
United States of America  
Nuclear Regulatory Commission

Docket Number:

50-440

50-441

Prepared by

Lake County Commissioners  
Lake County Disaster Services Agency

COPY

1. Albert E. Stewart  
39 Fairdale Street  
Painesville Township, Ohio 44077

Director, Lake County Disasters Services Agency

2. Contractor employed in preparation of the County's evacuation plans:

PRC/Voorhees  
1500 Planning Research Drive  
McLean, Virginia 22102

3. The County/Contractor are currently in the process of developing an emergency evacuation plan for the county therefore, submission to the NRC or to FEMA will come later in the process.

4. (Not applicable)

5. (A) The County/Contractor are now in the process of preparing a radiological emergency response plan.

(B) The plan has not been submitted to NRC or to FEMA.

(C) The County plan will be submitted for NRC and FEMA review in the Fall of 1982.

(D) The Contractor identified in Response # 2 is assisting the County in the preparation of its emergency plan.

6. Arrangements for the payment of costs of proposing, adopting and implementing the emergency evacuation plans are set forth in the agreement between the Board of County Commissioners and the Licensee, dated October 22, 1981.

7. The relationship of the Applicant to the County's plan development process is set forth in the agreement between the Board of County Commissioners and the Licensee, dated October 22, 1981.
8. The Lake County Commissioners have the ultimate responsibility for the preparation of the emergency evacuation plans. The Lake County Disaster Services Agency supports the County Commissioners in the preparation of these plans.
9. Michael D. Coffey, President  
E. V. Mastrangelo  
John F. Platz  
Albert E. Stewart, Lake County Disaster Services Agency  
William Varga, Clerk  
Robert H. Retzler, Operations  
Edmund Erndt, Planner  
Russell Bimber, Planner
10. Agreements for services in the event of an emergency at PNPP will be obtained from all designated response agencies, including:
  - (A) School districts
  - (B) Ambulance operators
  - (C) Tow-truck operators
  - (D) Law enforcement
  - (E) Fire Departments
  - (F) Media
  - (G) Physicians and Nurses
  - (H) Other governmental agencies

11. The County's response at any stage of emergency will be set forth in detail in Part D and Part J of the Radiological Emergency Response Plan and in the Standing Operating Procedures (SOP's) which support this plan.
12. (A) Procedures for the prompt notification of the County in the event of a radiological emergency at PNPP will be set forth in detail in Part E of the Radiological Emergency Response Plan and the Standing Operating Procedures (SOP's) which support this plan.
- (B) The County's procedures for initiating supporting responses from other State, Federal, Local government and private organizations in the event of an off-site emergency will be set forth in detail in Part E and Part J of the Radiological Emergency SOP's that which support that plan.
- (C) Drills and exercises to assure that the County's plans are workable will be specified in Part N of the County plans.
13. (A) Reception centers which will house, clothe, and feed the evacuated persons will be identified in Part J of the Radiological Emergency Response Plan.
- (B) Part J of the Radiological Emergency Response plan will describe the steps that are being taken to assure citizens that reception care centers exist and will be equipped. Agreements will be secured with agencies providing services at these centers.

13. (C) Facilities for pets will be provided at reception centers. These facilities will be described in Part J of the Radiological Emergency Response Plan.
- (D) Homes and businesses within the evacuated areas will be patrolled by local police. This function will be described in Part J of the Radiological Emergency Response plan.
- (E) No priority will be exercised over persons evacuating in private vehicles. The highest priority will go to school populations. Procedures for the evacuation of all non-auto-owning population will be set forth in Part J of the Radiological Emergency Response Plan and in the Standing Operating Procedures (SOP's) which support this plan.
- (F) All emergency workers will be protected against excessive exposure through the use of personnel monitoring devices and prompt reassignment. Detailed description of the measures for the protection of emergency workers will be included in Part K of the Radiological Emergency Response Plan and its supporting Standing Operating Procedures (SOP's).
- (G) All workers participating in the emergency response will be trained in (1) basic radiological safety and (2) their specific role in the emergency response. Type of training and persons to be trained will be specified in Part O of the Radiological Emergency Response Plan.
- (H) Local safety forces, as part of their security patrolling of evacuated areas, will confirm the extent of evacuation. This procedure will be described in Part J of the Radiological Emergency Response Plan.

13. (I) The public will receive continuing current information on the radiological emergency. This information and the methods by which it is disseminated will be described in Part G of the Radiological Emergency Response Plan.
- (J) Emergency workers who will support reception centers will receive training in (1) basic radiological safety and (2) their role in an emergency response. This training will be described in Part O of the Radiological Emergency Response Plan.
- (K) Disposal of contaminated livestock and crops is addressed in the Ohio Plan for Response to Radiation Emergencies at Licensed Nuclear Facilities.
- (L) Procedures for the compensating of persons who suffer losses or damages because of an emergency at PNPP are described in Part M of the Radiological Emergency Response Plan.
- (M) The Licensee is paying the cost of developing the County's emergency response plan.
13. (sic). Safeguarding of public water supplies, septic tank systems, groundwater and wells within the EPZ is described in the Ohio Plan for Response to Radiation Emergencies at Licensed Nuclear Facilities.
14. The County intends to install an independant off-site alert monitoring system consisting of a minimum of 16 stations located throughout the County, each will have radiation detectorion, high-volume air samplers and meteorological capabilities.
15. Traffic flows during the evacuation of person from within the EPZ have been analyzed through the use of computer models which generate the quantity of evacuating traffic,



distribute it chronologically throughout the evacuation period and assign it onto evacuation routes out of the EPZ. Location of traffic congestion and the severity of congestion at these locations is identified.

16. Evacuation under severe weather conditions will be addressed in Part J of the Radiological Emergency Response Plan.
17. Time estimates for all components of the EPZ population will be included in the evacuation times estimate report.
18. Nursing and emergency medical services will be available at reception centers. Procedures for providing these services will be described in Part J and Part L of the Radiological Emergency Response plan.
19. Not applicable; Lake County Memorial Hospital (West) is not within the plume exposure pathway EPZ as identified by the County.
20. Termination of emergency activities within the County will be addressed in Part M of the Radiological Emergency Response plan.
21. Security patrol will be provided throughout the evacuated areas, to assist in the evacuation effort and to answer questions. Procedures for the security patrolling of evacuated areas will be included in Part J of the Radiological Emergency Response Plan.
22. Costs of operation of the reception centers are incurred by all local response agencies participating in their operation. These agencies will be identified in Part J of the Radiological Emergency Response Plan. Provisions for the payment of these costs will be described in Part M of the Radiological Emergency Response Plan.

23. Provision of police and fire and all other services at reception centers is described in Part J of the Radiological Emergency Response Plan. Costs of these services will be incurred by all agencies participating in the operation of the reception centers. Payment of these costs will be addressed in Part M of the Radiological Emergency Response Plan.
24. The handling of rumors during an emergency at PNPP will be described in Part G of the Radiological Emergency Response Plan and in the Standing Operating Procedures (SOP's) which support this plan.
25. The County radiological emergency response plan is now being prepared. The plan is begin prepared by the Lake County Commissioners, with the support of the Lake Coutny Disaster Services Agency. PRC/Voorhees is supporting the plan writing effort with consulting services. The qualification of PRC/Voorhees are summarized in its Federal #254 questionnaire.  
  
Local, state and federal agencies involved in the planning effort will be identified in Part A of the Radiological Emergency Response Plan.
26. (Cannot be responded to verbally)
27. The plume exposure pathway EPZ will be described in detail in the evacuation time estimate report.
28. Provisions for the evacuation of all population in institutions will be described in Part J of the Radiological Emergency Response Plan.
29. The Standing Operating Procedures (SOP's) in support of part J of the Radiological Emergency Response plan

will list all institutions containing transport-dependents, and will give the populations involved.

30. Provisions for the education of the public as to a radiological emergency at PNPP will be described in Part G of the Radiological Emergency Response Plan. Provisions for public notification will be described in Part E of the Radiological Emergency Response Plan. The notification system hardware is now under design by the Licensee.
31. The costs of the emergency plan and its annual maintenance will be estimated following the acceptance of such plan by FEMA and the NRC. The Lake County Disaster Services Agency will document these costs.
32. The communications system for the County EOC will be described in Part F and Part H of the Radiological Emergency Response Plan. The Cross reference appended to the plan will demonstrate how this system will meet the evaluation criteria for Standard F, NUREG 0654.
33. In conformance with Ohio DSA and Ohio EPA policies, thyroid blocking agents for use by the general public will be excluded in the County plan.
34. The total population of the plume exposure pathway EP2 will be identified in the evacuation time study report.
35. All time estimates for the evacuation of the public from the EP2, and all assumptions upon which these estimates are based will be included in the evacuation time study report
36. Projected or actual dose levels that would trigger public notification for sheltering or evacuation will

be stated in Part I of the Radiological Emergency Response Plan.

37. Postulated dose rates will not be included in any part of the plan. Projected dose rates which will trigger various protective responses will be stated in Part I of the Radiological Emergency Response Plan.
38. Duration of the protective responses will not be estimated in any part of the response plan. The plan will provide for response durations ranging from negligible duration up to indefinite duration.

(SECOND SET)

R E S P O N S E S

To

Interrogatories Filed by  
Sunflower Alliance Pursuant to Previous Orders of  
the Atomic Safety and Licensing Board  
and 10 CFR 2.70 b

Lake County Commissioners  
Lake County Disaster Services Agency

Prepared for  
United States of America  
Nuclear Regulatory Commission

Docket Number:

50-440

50-441

Prepared by

Lake County Commissioners  
Lake County Disaster Services Agency

1. In compliance with current Ohio DSA and Ohio EPA policy, local plans do not call for the use or distribution of thyroid blocking agents.
2. The design and operation of this facility is entirely within the jurisdiction of the Hospital, and the Hospital is the only qualified source of information regarding this system.
3. Procedures for the handling of decontamination effluent at the Lake County Memorial Hospital are entirely within the jurisdiction of the Hospital and/or the licensee.
4. Temporary pet kenneling will be provided at reception centers. Evacuees will also be encouraged to make use of commercial kennels in the vicinity of reception areas. Evacuees will be allowed to take pets with them. Provisions for the accomodating of pets will be incorporated in Part J of the Radiological Emergency Response Plan and in the Standing Operating Procedures (SOP's) that support this plan.
5. Local fire departments will prepare and maintain rosters of deaf persons and will notify them through direct contact. Procedures for this notification will be incorporated into Part E of the Radiological Emergency Response Plan and into the Standing Operating Procedures (SOP's) that support this plan.

6. The special provisions for the notification of non-English-speaking residents of the EPZ will be addressed in Part E of the Radiological Emergency Response Plan and in the Standing Operating Procedures (SOP's) that support this plan.
7. The U.S. Coast Guard will be responsible for the notification of boaters within the 10-mile radius of PNPP. This responsibility will be identified in the Radiological Emergency Response Plan and in the Standing Operating Procedures (SOP's) that will support this plan.
8. Evacuation of handicapped persons will be addressed in Part J of the Radiological Emergency Response Plan and in the Standing Operating Procedures (SOP's) that will support this plan. Lake County Safety forces will maintain a list of handicapped persons and will arrange for the transportation of such persons.
9. The population of the EPZ will evacuate as described in the Evacuation Time Study Report.
10. All questions relating to the FSAR should be addressed to the licensee.
11. Lake County is currently adopting a plume exposure pathway EPZ to conform to the regulations contained in NUREG 0654 and the guidelines contained in NUREG 0396. The EPZ boundary establishment is described in the evacuation time study report.
12. The County Radiological Emergency Response Plan will describe the plan for evacuating the total permanent,

seasonal and transient population from the area designated by the County as the plume exposure pathway EPZ. Protective action guidelines will be identified in Part I and Part K of that plan.

13. The County Radiological Emergency Plan is based on the guidelines and criteria of NUREG 0396 and NUREG 0654.
14. The County emergency response plan assumes that voluntary and spontaneous evacuation of persons within the plume exposure pathway will occur. The County plan ( Part J) will provide for traffic control, perimeter control and public information to deal with such voluntary and spontaneous evacuation.
15. Voluntary and spontaneous evacuation of persons outside the plume exposure pathway has no significant impact as noted in the evacuation time study report.
16. Adequate facilities available to shelter simultaneously the total permanent and peak seasonal population of the area designated by the County as the plume exposure pathway EPZ (see response 11) will be determined in the Lake County Emergency Plan.
17. The County Disaster Services Agency, in its planning process, will adopt protective action guidelines. These guidelines will be specified in detailed in Part I and Part K of the Radiological Emergency Response Plan.



18. The County has adopted guidelines for the location of reception centers as recommended in NUREG 0654. The location of these centers will be identified in Part J of the Radiological Emergency Response Plan.
19. The evacuation time estimate report projects the fraction of population not having automobiles available for evacuation for whatever reason, including the use of all available family automobiles by workers outside the EPZ.
20. Evacuation time estimates have been updated to reflect the 1980 U.S. Census. Time estimates will be updated as required by Federal regulations.
21. The County is aware that the Ohio DSA polices exclude the use of radioprotective drugs.
  - (b) Not applicable, given the response in 21(a).
  - (c) Not applicable, given the response in 21(s).
22. All of the cited contingencies, as well as others not included in this Interrogatory, are incorporated into the traffic flow rates as used in the evacuation time estimate studies and reported in the Evacuation Times Estimate Report.
23. Vehicles required to evacuate non-auto-owning segments of the population are estimated in the Evacuation Time Estimate Report. Other vehicles needed to support an evacuation (e.g., tow trucks) will be identified in the Standing Operating Procedures (SOP's) for the individual response agencies.
24. Not within the scope of the local response plan.

25. Mr. Edward Plank from PRC/Voorhees visited the plant site and traversed all roadways designated as evacuation routes. All findings and conclusions based on this reconnaissance are incorporated into the evacuation time study report.
26. Basis of authority for planning and execution of the plan will be incorporated in Part A of the Lake County Radiological Emergency Response Plan.
27. Imposition of martial law is not incorporated in the existing planning for the County response to radiological emergency at PNPP.
28. Part E and Part J of the Working Draft of the Radiological Emergency Response Plan will incorporate arrangements to allow for sufficient time for alerting the public and implementing the appropriate protective actions.
29. Part A of the Working Draft of the Radiological Emergency Response Plan will state the basis of authority for preparing and implementing the local response plan.
30. Part J of the Working Draft of the Radiological Emergency Response Plan will incorporate protective responses other than evacuation of the general public.
31. Evacuation of all schools, public as well as private, will be addressed in Part J of the working draft of the Radiological Emergency Response Plan, and will be further addressed in the Standing Operating Procedures (SOP's) which will support this plan.
32. The County is planning to install and operate an independent alert monitoring system consisting of stations

throughout the County with: (1) radiation detectors of the Reuter-Stokes type SENTRI 1011 or equivalent, (2) high-volume air samplers and (3) meteorological monitors. Data from these stations will be telemetered to a central location. Source of funding is the Licensee.