

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

CINCINNATI GAS & ELECTRIC
COMPANY, et al.
(William H. Zimmer Nuclear
Power Station)

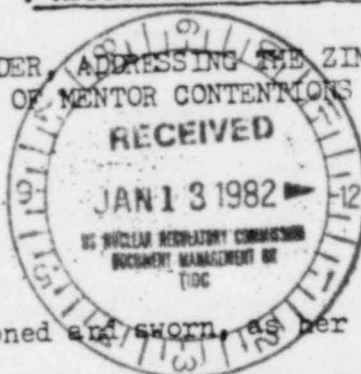
DOCKET NO. 50-358

APPLICATION FOR AN OPERATING LICENSE

DIRECT TESTIMONY OF MARY REDER, ADDRESSING THE ZIMMER AREA CITIZENS-ZIMMER
AREA CITIZENS OF KENTUCKY AND CITY OF MENTOR CONTENTIONS 34; 35; 36, (B), (C), (D),
(I), (K).

State of Kentucky }
County of Campbell }

SS:



Mary Reder, being duly cautioned and sworn, as her testimony states as follows.

I, Mary Reder, am a resident of Campbell County, Kentucky. My address is Route 2, Box 270, California, Kentucky. I have resided at that rural address, which is about four miles from the Zimmer plant, since 1967. I have represented the City of Mentor, Kentucky, in the Zimmer licensing hearings and have received countless documents dealing with the Zimmer plant and related radiological emergency planning, including so-called "interim" plans for Kentucky and Campbell, Pendleton and Bracken Counties. I have studied these plans as well as NUREG-0654 and parts of 10CFR that address emergency planning. I have attended numerous meetings about and including radiological emergency planning, both public and relatively closed, with officials from NRC, FEMA, state and local DES, fire and police departments, schools, public offices on the state, county, and city levels, and others and have had many private conversations with many of these people. I have discussed Zimmer emergency planning with General Wilbur Buntin, Wayne Berry, Tom Little, and Bob Alexander of DES, Superintendent Gene Sell of Campbell County Schools, and county Judge-Executives Hehl, Corliss, and Pribble, among many others.

The latest Zimmer radiological emergency plans that I have seen for Kentucky and Campbell, Pendleton and Bracken Counties are dated October, 1981, and are clearly identified as "interim" plans. I have heard DES and CG&E representatives describe these plans as unfinished and incomplete. When I and others

8201150411 820108
PDR ADDCK 05000358
PDR

0503
5011

have questioned the adequacy of the plans to protect our health and safety, the planners' answer has often been that these concerns will be taken care of by so-called Standard Operating Procedures that will be developed at some unspecified time in the future. Neither as a representative of Mentor before the NRC nor as a citizen who lives within the 10 mile EPZ have I had the opportunity to see or evaluate any of these SOPs or any final plans or updated plans or revisions or additions to these "interim" plans. In my opinion and as one who has a reasonable knowledge of the problem and of the plans as they exist, the "interim" plans are unworkable and reliance upon these plans during an accident at Zimmer could result in disaster. To issue an operating license to Zimmer on the basis of these plans and before the community has had ample opportunity to study and approve final or relatively final plans is dangerous and completely unjustified.

Further, the Kentucky and Campbell County radiological response plans invalidate themselves because they repudiate their own use during an emergency. The Campbell County plan contains the following statement: "During an emergency, Standard Operating Procedures (SOPs), developed from the plan, will be employed to respond to the emergency rather than this planning document". This statement is essentially repeated elsewhere in the Campbell County Basic Plan and twice in the Kentucky plan. SOPs are not included in the plans and have not been submitted separately. Since the plans disavow themselves and establish SOPs as the sine qua non of emergency planning during an emergency, and since no SOPs are contained in the proposed plans or have been otherwise submitted, the people of Mentor, of Campbell County, and of Kentucky have no plan to protect their health, safety, and interests during a radiological emergency at the Zimmer plant. As they stand, the so-called plans are by self-description and by objective inspection simply statements of intentions or, at best, plans for plans. To consider them in any other light would deny Mentor and affected citizens their right to make a timely evaluation of plans that would actually be used during an emergency, those that, if they exist, are hidden in the undisclosed SOPs.

Although the 50-mile ingestion pathway for the Zimmer Station EPZ includes about 700 square miles of southeast Indiana, there are no radiological emergency plans by or on behalf of the State of Indiana or the affected local Indiana governments. The emergency plan for the William H. Zimmer Nuclear Power Station includes the radiological emergency plans of Kentucky and Ohio by reference (Appendices E, G, and H), but there is no Indiana plan or reference to it there. I have seen no evidence to suggest that Indiana has a plan for Zimmer or the inclination to produce one or the capability of implementing one. This omission endangers the health, safety, and interests, not only of the people of Indiana, but also of the people of Mentor, Campbell County, Kentucky, and Ohio.

The people of Mentor, of Campbell County, and of Kentucky (and of Indiana and Ohio) do not live in a vacuum: political boundaries are of no significance here. Parts of Kentucky (including Mentor), Indiana and Ohio form a tri-state area within which there is production, distribution and consumption of milk and other foodstuffs with little or no regard to point of origin. The people of Mentor buy their food in this tri-state market and must not be exposed to the hazards of contaminated food from the unprotected Indiana part of the 50-mile EPZ. Simple humanitarianism extends this concern to all people who might be similarly exposed.

Having worked in Ohio for several years and in Alexandria for several years I have regularly driven large parts of major evacuation-routes thousands of times. In addition, for professional, social, and personal reasons, I have driven about 100,000 miles of the other roads within the 10-mile EPZ, most of them many times. I have traveled many thousands of miles over these roads, night and day, winter and summer. Many of the roads are narrow, winding and hilly, and slick and treacherous during and after rain or snow. Few have center lines or shoulders. Many are in various states of disrepair, some relatively extreme. Some are supported by pilings and fall-offs into ditches, creeks, and hillsides are frequent.

Several times each year some roads are impassable because of flooding. This occurs on California Cross Road at and near Gubser Mill, on Smith Road near Route

several places on Route 10 and on Twelve Mile Road. Sometimes, especially at night in the fall and winter, fog is so thick that driving at 10 miles an hour is dangerous. Snow and freezing rain are special problems, usually several times each winter. On two or three occasions I have been snowbound at home for several days at a time; several times I have had to stay in town overnight because sudden snowstorms made driving home impossible. The schools are closed for several "snow days" each winter because it is difficult or impossible for buses to travel these rural roads. There are so many steep hills and bad situations in snow and freezing rain that I can not list them all here; four that come to mind immediately because I drive them often are Persimmon Grove Pike near California Cross Road, Schababerle Hill Road, Route 10 between Wesley Chapel and Ivor Road, and Smith Road near Route 8. Snow removal is often delayed by hours, sometimes days, and is often largely ineffective, especially in the rural areas. The most recent example occurred after a relatively moderate snow on or about December 16, 1981. U.S. 27 was closed for two to three hours because of snowdrifts at Low Gap; Route 8, Route 10, and Persimmon Grove Pike were snow covered and dangerous and there was no evidence of any snow removal in the late morning hours when I drove them. Persimmon Grove Pike was still icy and dangerous two days later.

Because of the above factors, among others, the Stone and Webster evacuation time study is deficient in several respects and gives a falsely optimistic impression of the ability of the people to evacuate in a safe and timely manner during a radiological emergency. The study grossly underestimates evacuation times; does not give estimates of evacuation times for the segment of the non-car-owning population dependent upon public transport; does not indicate the critical assumptions which underlie the time estimates (e.g., day versus night, workday versus weekend, peak transient versus off-peak transient, and evacuation on adjacent sectors versus nonevacuation); does not address the relative significance of alternative assumptions; does not make evacuation time estimates for each special facility on an individual basis; does not consider the impact of peak populations including behavioral aspects; does not make specific recommendations

for actions that could be taken to significantly improve evacuation time; does not contain comments by the principal organizations resulting from their review of a draft submittal of the study; and contains unresolved conflicts of great proportions between evacuation time estimates by Stone and Webster and those by the Kentucky Disaster and Emergency Services, the Ohio Disaster Services Agency, and the Clermont County Disaster Services Agency.

The Study also contains errors in measurements of road widths that could influence calculations of road capacities and result in additional underestimations of evacuation times. I have measured the road widths of the major evacuation routes at random places and found that the widths indicated in the study exceed the actual road widths by several feet in each case.

Traffic delays and detours caused by weather and road conditions, automobile accidents, or other impediments are ordinarily not uncommon and are crucial factors to consider in a mass evacuation in the event of an accident at Zimmer. Other crucial factors are extraordinary traffic congestions and the possible paths of the radioactive plume. Common sense would dictate prior consideration and testing of several alternatives for such a severe emergency. Nevertheless, there are no provisions in the plans for alternate evacuation routes or for evacuation in opposite directions on the provided routes. General Buntin has publicly stated that provisions for alternate evacuation routes will not be written in the plans but that such decisions will be made during an emergency as needed. He would not be specific about the process or the mechanics of the decision making. Such a casual and authoritarian approach to a possible disaster situation is entirely unacceptable and must be condemned.

A designated major evacuation route, Kentucky Route 8, is dangerous in places for ordinary use and obviously unfit for emergency evacuation purposes. In particular, south of Twelve Mile Creek the road is built into the side of a steep hill and is frequently subject to slippages, some of them so severe that the north bound lane has been practically unusable for weeks at a time. Piles have been driven recently in an effort to support the roadway, but the road surface is

dangerously irregular and convoluted and would be particularly hazardous during emergency evacuation conditions.

The proposed system for prompt notification of the public is inadequate and a burden to the people in that the siren system is designed to warn only 40% of the people within the 10-mile EPZ and has not been tested to ensure that it will achieve that design objective in any or all weather conditions for people outside or inside their homes during all their various activities; the radio system will not serve people who are outside their homes, farmers in the field, or people in their automobiles; and the integrated siren and radio system is not adequate to protect those with hearing or sight impairments or those who operate or are near loud or noisy equipment and, being dependent upon electricity, will not function during periods of electric power outage. Much of the rural area in Kentucky near Zimmer is served by Kentucky Utilities and Owen County Rural Electric Cooperative. Power outages lasting from minutes to hours are not rare. As a recent example, on January 4, 1982, during and following a windstorm my home was without electricity from 6:15 A.M. to 8:00 A.M. and from 10:00 A.M. until after midday. We expect to be without electricity for long periods of time several times yearly and keep oil lamps and a supply of candles handy. If it is contemplated to use batteries as backup power in the home radios, the questions of battery life, replacement procedures, and expense have not been resolved. A growing number of people in the area heat their homes with wood and spend considerable time cutting trees with chain saws in nearby woods, especially in the autumn months. The attenuating effect of the standing trees combined with the noise of the chain saws would probably make impossible the hearing of warning sirens.

Present plans call only for the Kentucky Radiation Control Branch to "coordinate the efforts of the Department for Natural Resources and Environmental Protection in collecting and delivering water samples" to some unspecified destination for analysis and possible isolation of the public water supply and General Buntin has publicly stated that Kentucky's equipment and procedures for protection of the

public from contaminated water following a radioactive release are not equal to or comparable with those of Cincinnati. No formal plans exist for the transportation or rationing of uncontaminated water within the 50-mile zone. Therefore, provisions for the monitoring, control and regulation of public water supplies, or for the availability of uncontaminated water to the public, before or during a radiological emergency are not adequate to protect the health and safety of the people of Mentor or for a large population within the 10 or 50-mile EPZs in Kentucky. There is no evidence that the water treatment and supply facilities have the equipment or trained personnel for continuous monitoring of water before and during a radiological emergency. The present plans are too undeveloped and too clumsy and time-consuming to ensure that prompt and appropriate protective action can be taken. I have seen the recent settlement between the Applicant and Cincinnati which contains a lengthy list of sophisticated equipment for the protection of the people of Cincinnati. The people of the City of Mentor and a large population within the 10 and 50-mile EPZs, who receive their water from treatment and supply facilities that are situated near and are not unlike those of the City of Cincinnati, have not received consideration and potential protection similar or equal to that given the people of Cincinnati.

Mary Reder
MARY REDER

Sworn to and subscribed in my presence this 8th day of January, 1982.

Delmar Faber Webb
NOTARY PUBLIC

My commission expires: 10/28/85