

Nebraska State Legislature

Unicameral

Lincoln, Nebraska 68509



SENATOR STEVE FOWLER

District No. 27
1st Floor - Room 1110
Lincoln, Nebraska 68509
(402) 471-2632
(402) 471-2340

COMMITTEES

Chairman, Rules
Appropriations
Executive Board
Reference
Administrative Rules and
Regulations Review
Nebraska Retirement Systems
Telecommunications
Legislative Council

EIGHTY-SIXTH LEGISLATURE

October 2, 1979

Chairman Joseph M. Hendrie
Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Chairman Hendrie:

I was interested to learn of the Nuclear Regulatory Commission's approval of Nebraska's Nuclear Emergency Response Plan. As a cosponsor of Legislative Resolution 41 which calls for an investigation to determine whether Nebraska's plan provides "a practical and reliable method of handling incidents similar to those which recently occurred in Pennsylvania," I would like to receive your answers to six basic questions about our state's plan. My questions are these:

1. Why does the plan fail to require that all residents near a nuclear plant be informed about protective actions they may be asked to take during a nuclear plant accident?

The General Accounting Office report of March 30, 1979, "Areas Around Nuclear Facilities Should be Better Prepared for Radiological Emergencies," recommends that:

"To the extent that national security is not jeopardized, require that the people living near nuclear facilities be provided with information about the potential hazard, the emergency actions planned, and what to do in the event of an accidental radiological release." (p. 35)

One simple means of public education was proposed in the August report of the House Committee on Government Operations: include the information several times a year in customers' electric bills.

Unless advance planning includes informing the public, how will the widespread confusion of Three Mile Island be avoided in the future?

1387 184

7911230 338

2. Why does the plan fail to spell out who decides what method to use to notify the public that an accident is taking place? Do mayors of nearby towns decide? The County Board? The Sheriff? The part-time Civil Defense volunteers in the counties surrounding Nebraska's plants? What methods are feasible to use to warn people? Sirens? Going door-to-door as the plan suggests? How much time would each method require?

The Nebraska plan agrees with the NRC/EPA Taskforce that a half-hour might be all the time available to warn people to take shelter or evacuate, but it does not specify arrangements for selecting a quick method of alerting people that an emergency exists.

3. Why does the plan not require Nebraska's plants to improve their radiation measuring devices so they could function during a Three Mile Island type of accident?

As of July, neither Cooper nor Fort Calhoun had radiation monitors that could stay on scale to measure radiation releases of the size of Three Mile Island's, according to NRC information supplied to the House Committee on Government Operations. The Committee's report noted that during the early part of the Three Mile Island accident, the plant's monitoring equipment was unable to measure accurately the radiation which escaped mostly from the plant stack but also from the ventilation system, the waste treatment system, and the industrial waste system which flows into the Susquehanna, so that "it will never be known how much radioactive material the people around Three Mile Island were exposed to."

State and local officials could certainly make better decisions more efficiently during an accident if radiation monitors provide accurate and timely information.

4. Does NRC concurrence indicate a belief that Nebraska's plan has demonstrated a local capability to shelter people in an emergency?

Of the shelter spaces available within a five mile ring of Fort Calhoun, 4,500, or over one-third of the places, are at Dana College. Of the shelter spaces available within a ten mile ring of the Cooper Station, three-fourths are at Peru State Teachers College. It would seem that this concentration of sheltering locations would mean that if the wind were blowing radiation the wrong direction or if snow blocked a few key roads, shelter space for each person near the plant would not be available; in fact, thousands of people would lack shelter.

In addition, the home basement shelter estimates, drawn from a 1967 home fallout shelter survey, project 60% of the homes near Fort Calhoun to have usable basements and 55% near Cooper. In an emergency, how many people would be able to determine if their basements were adequate? They have been given no information.

5. Does NRC concurrence indicate a belief that Nebraska's plan demonstrates a local capability to evacuate people in an emergency?

The plan itself says that "risk population is based on resident distribution and does not consider visitor and transient sectors." Not considered in the ten mile ring evacuation planning are many of the 460 Peru State students who do not live in the dormitories, any visitors to the festivals at Brownsville (approximately 700 people a day came to the fiddlers' festival this year, over 10,000 a day a few years ago), vacationers at Indian Cave State Park (who averaged nearly 1,000 a day this July and August), or as many as 12,000 visitors a day at the DeSoto Wildlife Refuge located two miles from Fort Calhoun. These people are not considered in estimates of numbers of people on the highways or in plans for care at reception areas outside the danger zone.

The plan gives local government responsibility for arranging transportation to Fremont and Bellevue for everyone who is without a car: over 900 people within a five mile ring of Fort Calhoun and 49,000 people within a twenty mile ring. This task assignment appears unrealistic given the time constraints which could be present.

6. Since Three Mile Island showed that an accident can occur in which a plant's engineered safety systems do not work properly, would it not make sense to test emergency plans in a drill for a similar accident, rather than a so-called "design basis accident" in which all the safety systems work perfectly?

The July 31 drill at Fort Calhoun tested only the emergency response to a "standard design basis loss-of-coolant accident" in a brief "site emergency" during which no dangerous radiation left the plant site. That test may have been useful in a limited way to check to see that state agency phone numbers in the plan are current, but the exercise could not have shown whether the plans for sheltering or evacuation are practical and reliable.

In constructing the Emergency Response Plan, the Nebraska Civil Defense Agency has clearly gone beyond the minimum federal requirements in several respects, most importantly, in the extension of emergency planning beyond the so-called "Low Population Zone" around the plants: a three mile ring for Fort Calhoun and a two mile ring for Cooper. The NRC/EPA Taskforce Report (December, 1978) points out the importance of emergency planning for the larger area:

"Studies have been performed which indicate that if emergency actions such as sheltering or evacuation were taken within about ten miles of a power plant, there would be significant savings of injuries and deaths from even the most "severe" atmospheric releases." (p. I-7)

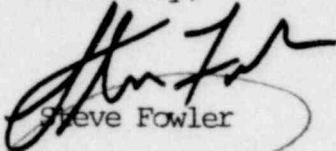
Chairman Joseph M. Hendrie
October 2, 1979
Page 4

The Nebraska plan would be improved even more, I believe, by careful consideration of the six question-areas above. Unless there are additions to the plan, I fear it may serve mainly to give the public a false sense of security.

Since it has been the NRC which licensed the three nuclear plants in Nebraska (including the now defunct Hallam plant) and concurred in Nebraska's Nuclear Emergency Response Plan, I believe it is most appropriate for your agency to respond to my questions.

I look forward to your letter.

Sincerely,



Steve Fowler

SF:ca

cc: Senator Don Wesely

1387 187