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'84 APR 16 P2:12

April 13, 1984

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CONTENTIONS OF RICHARD WILSON
CONCERNING NORTH CAROLINA EMERGENCY
RESPONSE PLAN

These contentions are filed promptly following the availability of the North Carolina Emergency Response Plan in Support of the Shearon Harris Nuclear Power Plant in accordance with the Board's directions and an extension of filing date granted by Samantha Flynn.

1. Section II2 of State Procedures (p1) is deficient because it provides no justification for the establishment of a uniform 10 mile plume exposure pathway radius. Some justification should be provided for not including Cary, including the new hospital which will likely be just outside the 10 mile radius by the time the plant becomes operational and would present a major additional complication if evacuation were necessary.
2. Section C 5f and C 6 of State Procedures (p.40) is deficient because the Radiation Protection Section
 - a) Has no method of testing the accuracy of their application of the various tools available to them for projecting the consequences of radiation releases.
 - b) Does not have enough experienced and trained personnel (there are 3) to both serve on the SERT team and to monitor activities at the plant site. Projection of consequences might therefore be done by less-than-optimally competent members of the RPS.

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- c) has no defined protocols for evaluating the significance of environmental monitoring values which are not compatible with projections based on release data at the plant site. There are no specified methods for revising a projection based on actual data points within the plume.
 - d) has no members with sufficient nuclear engineering training to interpret the events at a plant during accident conditions, though they consider this to be one of their sources of information for decision-making.
3. The plan in general is deficient because it does not specify the decision-making process the SERT leader would use in deciding whether or not to implement a protective action recommended by the Radiation Protection Section. The cost-benefit analysis that would be performed by that official rapidly on the spot should be thought out ahead of time as much as possible. Priorities should be established and it should be defined just what factors should and should not be considered in such an analysis. All costs of evacuating each of the planning zones should be specified.
4. The Plan in general is deficient because it does not specify how the SERT leader would weigh recommendations for protective action from the RPS and the Utility if they were to differ from each other.
5. Section D of State Procedures (p.42), (and Section D 6 Wake Co. Procedures p.29) is deficient because
- a) No brochure (figure 12) is included.
 - b) The language of the second paragraph of Section 2 provides no commitment whatsoever to actually use any of the methods mentioned.
 - c) There are no plans, drafts, outlines or schedules for any of the measures listed.

- d) There is no evidence that any of these methods would contribute to any greater degree of public readiness for an emergency than nothing at all.
 - e) Content of all these methods is not specified and therefore cannot be judged.
6. Section E 4a of State Procedures (p.47) is deficient because there are no commercial busses in the plume exposure pathway and no arrangements to use any other commercial busses.
7. Section E 4b of State Procedures (p.47) is deficient because
- a) There is no listing and no mechanism of identifying homebound non-ambulatory people.
 - b) According to current N.C. Statutes most ambulances and rescue squad vehicles are not equipped properly to transport hospitalized patients.
 - c) There is no estimate of the number of vehicles required except in the Applicants' evacuation time study. (Section 8.2)
 - d) There are not 130 emergency vehicles in the County.
 - e) No agreements exist with other Counties for nuclear accidents.
 - f) The number of volunteer emergency workers who would respond to an alert is extremely questionable; plans should be based on a response rate of no greater than 50% in organizations in which no attention has been given to composition which would avoid conflict between organizational and family responsibilities.
8. Section E4d of State Procedures (p.47) is deficient because
- a) 50 percent of school bus drivers are high school juniors and seniors (as young as 16½ years). They should not be expected to perform as emergency personnel without explicit and specific authorization from their parents. Even with such authorization they should not be trusted to perform in emergency situations.

- b) Adult bus drivers have minimal education and are paid very low wages. They cannot be trusted to put their jobs above family obligations or to perform adequately in emergency situations.
- c) Bus drivers have no contracts. There is no agreement on their part to perform in a nuclear accident.
- d) In normal operation, each bus makes 2 runs each day. Thus 2-round-trips to the shelter sites would be required. (This factor was not considered in traffic control plans or evacuation time estimates).
- e) Students who do not normally ride busses will be an extra burden, requiring even more round-trips.
- f) School busses are all refueled between 8:30 and 11:30 A.M. If an accident were to occur before busses were completely refueled, additional delays would be encountered for refueling, and some busses would probably run out of gas.
- g) Parents must sign "release" slips in order for students to ride anywhere other than from home to school. All parents should sign releases for their children to be transported by bus in case of nuclear accident.
- h) Most parents would choose to and demand to pick up their children at school. The chaos at every school in the area would require all local law enforcement officers and several county officers to contain. This factor is not mentioned in the plan.
- i) Officials directly involved in school bus management have not been consulted on the role busses are to play in an emergency.

j) Present planning assumes that teachers will leave their cars and families in the area and supervise the children on the bus and in the shelters. This is an unreasonable and unrealistic demand on teachers.

k) No specific plans are made for the special security needs of 5000 students in an age when kidnapping is increasingly prevalent.

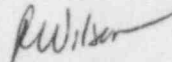
9. Section E4e (p.47) is deficient because it provides no estimate of the number of people without transportation, (Applicants' estimate of 240 families in evacuation time study (p. 3-2) seems far too low), no suggestion as to how people without transportation would get to pick-up points, and no criteria for determining when and where they would be "established as required".
10. Section E5 of State Procedures (p 47) is deficient because it offers no quantitative definition of "contaminated vehicle". In the event of a substantial release of radiation before an evacuation were ordered, the impoundment of many vehicles would critically alter the evacuation plan. Confusion about this definition might produce tremendous delays or dangerous slip-ups.
11. Section E5h of State Procedures (p.48) is deficient because no criteria for entry into the 10 mile EPZ are defined. e.g. will access be allowed to parents of children in day care, parents with such children at home, people with dependents without vehicles, people needing to secure their businesses, people needing to remove a few belongings from their homes? Also no maps are available to demonstrate that impossible traffic jams will not be created by hundreds if not thousands of vehicles trying to re-enter the 10 mile EPZ.

12. Section Eg of State Procedures (p.50) is deficient because

- a) The State demonstrates no independent assessment or even critical review of the Applicants' evacuation time study. Indeed, they present it as if it were commissioned by them.
- b) The evacuation time study itself is deficient because
 - 1) The 15 minute notification assumption is unrealistic - longer would be required (See pages 21-26 of Wake Co. Procedures.)
 - 2) The 1 evacuating car/family assumption is too low - many families would take 2 cars.
 - 3) The 240 family without transportation is too low - there are more without cars and many whose only car would be out of the EPZ at work. Many have cars that are not in working order.
 - 4) School problems (See Contention 8) are not considered.
 - 5) The only validation of NETVAC is a study of 5000 cars leaving a racetrack - a situation that bears little relation to an evacuation, with many human factors to be considered. Thus there is no reason to accept the values predicted by the model.
 - 6) No allowance is made for examining and impounding vehicles which might be contaminated. Checking all vehicles could slow evacuation enormously. (See Contention 10).
 - 7) The "adverse weather" example assumes a decrease in capacity of only 25%. Heavy rainstorms or snow or ice storms would decrease capacity by a much greater factor.
 - 8) Great reliance cannot be placed on volunteer rescue squads and fire departments for vital notification and evacuation duties. Inadequate numbers of workers will be available.
 - 9) No discussion of alternatives to the NETVAC model is provided in Section 2,3.

- 10) No justification of the plots of vehicle departure rate (figures 7-1 - 7-3) are provided.
13. The Plan is deficient because no provisions are made to assure that fuel will be available for vehicles within the 10 mile zone who might not have enough to leave the zone.
14. Section E8 of State Procedures (p.50) is deficient because the State does not have enough snow plows in this area to effectively clear the roads of snow or ice in a reasonable amount of time.
15. Section IVB 11a and b of Wake Co. Procedures (p.20) are deficient because no specific plans and assignments exist for notification. Vague responsibilities and agreements are not sufficient for approval of a plan.
16. Figure 4 of Wake Co. Procedures (p. 22-25) is deficient because the notification time estimates do not anticipate the confused and disorganized traffic that would hamper their progress along their routes.

Respectfully Submitted,



Richard Wilson

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UNITED STATES OF AMERICA

84 APR 16 12:11 NUCLEAR REGULATORY COMMISSION

In the matter of CAROLINA POWER & LIGHT CO. Et al.) Dockets 50-400
Shearon Harris Nuclear Power Plant, Units 1 and 2) and 50-401 O.L.

CERTIFICATE OF SERVICE

I hereby certify that copies of Contentions of Richard Wilson Concerning North Carolina Emergency Response Plan have been served this 13th day of April 1984, by deposit in the US Mail, first-class postage prepaid, upon all parties whose names are listed below, except those whose names are marked with an asterisk, for whom service was accomplished by _____.

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