

15 February 1985

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

'85 FEB 19 ATT:07

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD
Glenn O. Bright
Dr. James H. Carpenter
James L. Kelley, Chairman

In the Matter of

CAROLINA POWER AND LIGHT CO. et al. (Shearon Harris Nuclear Power Plant, Unit 1)

Docket 50-400 OL

ASLBP No. 82-468-01

Wells Eddleman's Response to Summary Disposition Motions on Contention 215(1) (Evacuation Time Inaccuracy)

Applicants submit a motion and affidavit filled with glowing generalities of little substance. What substance there is mostly supports the contention. The Staff adds only an unsupported opinion (no facts, except that people do tend to evacuate from home, Staff's affiant believes, citing a source).

Neither Staff nor Applicants' affiants deal with the impact of the back-traffic to homes that must occur in their scenario. This back-traffic will affect traffic capacities moving out because the back traffic must make turns (including left turns across evacuation routes) to reach their homes or driveways.

Applicants admit (Klimm affidavit, paragraph 8) that their methodology double counts "employees at major places of employment and persons visiting major recreation areas within the EPZ", yet claim that the double counting is "small". Staff acknowledges (Urbanik, paragraph 5) that no data exists on the extent of the double counting. Yet if it includes the larges employers' employees, and recreational populations, both of which are groups in the thousands

502190386 850215 DR ADUCK 05000400 PDR of persons, double counting is inevitable and could be quite substantial.

But worse than that, the FTEs make a wrong assumption: that all the traffic from the employers' sites, recreation areas, etc. is out of the EPZ along the evacuation routes. The ETEs simply do not account for the trips within the EPZ. This matter is not dealt with in the affidavits. : Klimm for Applicants sort of dodges around it in hims paragraph 7, where he says a preparation/mobilization time of up to two hours" was included. But he doesn't say that it was based on the time or traffic densities associated with trips back to home. He only says it's based on "discussions" (undocumented) with officials, and that it is a time range that "would be associated" with such things as returning home. He never comes out and says that the figure was arrived at by explicitly taking into account those trins, nor does he say that trips home were discussed with the officials he talked to (see his paragraph 5, which only says "the assumption of evacuation from home" was discussed. It doesn't say how, or whether the trips home were taken into account). Knowing Applicants' efforts to state things in the most favorable light to them, these omissions and skirting of the issue are significant, and point to a lack of input. There is no evidence the trips home are included in the ETE traffic load modeling. Nor does either affiant refer to such inclusion.

For these reasons, summary disposition on 215(1) should be denied. A listing of facts in dispute is appended to this response.

Wells Eddleman

2-15-85

P.S. Concerning Hollar letter for Applicants of 2-11-85 re 57-C-3, and his letter of 2-8-85 re 57-C-13, a separate letter of response is also enclosed with this filing.

List of Facts in Dispute on 215(1)

- 1. The Harris ETE, contrary to Applicants' "fact" 2, does not take into account the effects of assuming evacuation from home in a say that shows the effect of this assumption on the time estimates. "State of the art" as a term for computer modeling is irrelevant. The question is whether the assumptions are realistic; offsetting errors with other errors is only "attempted" according to the Klimm affidavit, and may result in compounding errors, especially where the effect of each error is not known. No under-predictive assumptions to "offset" this overpredictive assumption of evacuation from home are cited in any of the affidavits re this contention.
- 2. There are no data on past nuclear plant evacuations used by HMM, according to discovery on this contention. Thus "Fact" 3 is irrelevant because there is no comparable information used.
- 3. Persons may seek to go home in evacuation conditions even if told not to; however, this is not taken into account by the Applicants or Staff. The trips home are not taken into account in traffic flow modeling, contrary to "Facts" 2,3 and 6 of Applicants.
- 4. The 30 to 150 minute assumption of Klimm et al is not based on any citation or analysis; Applicants' "Fact" 8 never addresses the effects of the assumption of evacuation from home on this time. It is obvious it would increase the time required. But by increasing the time required to initiate evacuation, the estimates err on the high side, thus making it more likely that any evacuation would not be ordered (due to insufficient time to complete it) when it might be a lifesaving measure.
- 5. The Harris plant double counting assumes all traffic moves out, but most of it will move through the EPZ, a fact not addressed in "Fact" 9 of applicants, which is unrealistic. The same problem applies to their "Facts" 10 and 11.

6. There is nothing but opinion behind "Fact" 12 assuming the ETF evacuation from home estimates are realistic.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the matter of CAROLINA POWER & LIGHT CO. Et al. Shearon Harris Nuclear Power Plant, Unit 1

Docket 50-400 0.L.

CERTIFICATEOF SERVICE

I hereby certify that copies of WE Response to summary disposition on 215(1), and letter to the Board re Hollar letters of 2-8 and 2-11-85 HAVE been served this 15 day of February 1985, 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 waiting for the postal rate increase to become effective. (noteno asterisks below)

Judges James Kelley, Glenn Bright and James Carpenter (1 copy each) Atomic Safety and Licensing Board US Nuclear Regulatory Commission Washington DC 20555

George F. Trowbridge (attorney for Applicants)
Shaw, Pittman, Potts & Trowbridge Rutha
1600 M St. NW ASLB P
Washington, DC 20036 USNRC

Ruthanne G. Miller ASLB Panel USNRC Washington DC 2055 5

Office of the Executive Legal Director Attn Dockets 50-400/401 0.L. USNRC Washington DC 20555 Pign Spence W. Perry
FEMA Room 840
Ony Washington DC 20740

Dan Read

Docketing and Service Section (3x)
Attn Dockets 50-400/401 O.L.
Office of the Secretary
USNRC
Washington DC 20555

Maleigh, NC 27606

John Runkle (E plan only)
Steve Rochlmis
FEMA-Suite 700
1371 Peachtree St.NE
Chapel Hill No 27514 Atlanta GA 30309

Dr. Linda W. Little Governor's Waste Mgt. Bd. 513 Albemarle Bldg. 325 N. Saliabury St. Raleigh, NC 27611

Travins Payne Edelstein & Payne Box 12607 Raleigh NC 27605 Robert Gruber
Exec. Director
Public Staff
Box 991
Raleigh NC 27602

Bradley W. Jones USNRC Region II 101 Marietta St. Atlanta GA 30303

Richard Wilson, M.D. 729 Hunter St. Apex NC 27502 correspond by Wall Eddleman