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LBP-85-27A

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

James L. Kelley, Chairman
Dr. James H. Carpenter
Glenn O. Bright

In the Matter of	Docket No. 50-400-OL
CAROLINA POWER & LIGHT COMPANY and NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY	(ASLBP No. 82-472-03 OL)
(Shearon Harris Nuclear Plant)	August 14, 1985

REASONS SUPPORTING SUMMARY DISPOSITION OF EMERGENCY PLANNING CONTENTIONS

In memoranda and orders dated February 27, 1985 and April 24, 1985, we ruled on several motions from the Applicants for summary disposition on emergency planning contentions. In those orders, we provided explanations of our rulings only when we denied a motion. We hoped thereby to help the parties plan for litigation and to speed the start of that litigation. In both orders we said we would provide explanations of the other rulings at a later date. We now provide explanations for our rulings in every instance in which we granted a motion that was opposed by one or more intervenor, and we impose one condition on the issuance of a full-power license. See our discussion of contention 213a. About half the motions for summary disposition were unopposed. We are mindful that the failure of the party opposing

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summary disposition to submit evidence against the disposition does not require that the motion be granted. The movant must still meet his burden of proof to establish the absence of any genuine issue of material fact. Cleveland Electric Illuminating Co. et al. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 753-54 (1977). We have judged that in every instance in which the motion was unopposed, the Applicants did indeed meet their burden of proof, but in light of the lack of opposition, we have not thought it necesary or useful to repeat arguments of the parties who supported the motion.

By and large, licensing boards, when considering motions for summary disposition under 10 C.F.R. § 2.749, will apply the standards established by the courts for considering motions for summary judgment under Rule 56 of the Federal Rules of Civil Procedure. Alabama Power Co. (Joseph M. Farley Nuclear Plant, Units 1 and 2), ALAB -182, 7 AEC 210, 217 (1974). A motion for summary disposition will be granted when the record shows that there is no genuine issue as to any material fact, and that the moving party is entitled to a favorable decision as a matter of law. 10 C.F.R. § 2.749(d). The record must be viewed in the light most favorable to the party opposing the motion. See Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-74-36, 7 AEC 877, 897 (1974) (citing federal court cases).

ONSITE EMERGENCY PLANNING

We admitted two contentions on onsite emergency planning, Contentions 144 and 154, in our Memorandum and Order, November 1, 1983,

at 11-12, 5, respectively. The Applicant filed a motion for summary disposition of the contentions on October 8, 1984. Accompanying the motion was an affidavit from Robert G. Black, Jr., Director of Emergency Preparedness for the Applicant. The Staff replied on November 8, 1984 in support of the motion. Accompanying the Staff's reply was an affidavit from Gerald E. Simonds of the Office of Inspection and Enforcement, Division of Emergency Preparedness and Engineering Response, Emergency Preparedness Branch, in the NRC. Mr. Simonds is a technical reviewer of work at the Shearon Harris plant and is responsible for assessing onsite emergency plans and preparedness. The Intervenor, Mr. Eddleman, replied in opposition to the motion on November 19, 1984. We granted the motion in our Memorandum and Order, February 27, 1985 at 1.

Contention 144

The text of Contention 144 is as follows:

> CP&L's emergency personnel levels do not meet the requirements of NUREG-0737, REV 1 [sic; Supp. 1] Table 2.

The Table sets out what the Staff thinks to be the minimum staffing a licensee should have during an emergency at a nuclear power plant. One issue raised by the contention in its original form, when the Applicant was still planning to complete a second unit, was whether the staffing levels would be sufficient to deal with a damaged reactor and an undamaged one at the same time. See "Wells Eddleman's Motion Concerning DCRDR Information", January 8, 1983. This issue has since

been mooted by the Applicants' decision to cancel plans for the construction of a second unit.

The Commission's emergency planning regulations require, among other things, that

> . . . adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, [and that] timely augmentation of response capabilities is available . . .

10 C.F.R. § 50.47(b)(2). This standard is elaborated by evaluation criteria in NUREG-0654, which sets out guidelines for assembling and reviewing emergency plans for nuclear power plants. Evaluation Criterion B.5 provides, in relevant part:

> Each licensee shall specify the positions or title and major tasks to be performed by the persons to be assigned to the functional areas of emergency activity. For emergency situations, specific assignments shall be made for all shifts and for plant staff members, both onsite and away from the site. These assignments shall cover the emergency functions in Table B-1 entitled, "Minimum Staffing Requirements for Nuclear Power Plant Emergencies." The minimum on-shift staffing levels shall be as indicated in Table B-1. The licensee must be able to augment on-shift capabilities within a short period after declaration of an emergency. This capability shall be as indicated in Table B-1. . . .

Table B-1, to which this evaluation criterion refers, is the same as the table referred to in the contention, Table 2 of NUREG-0737. Compliance with Evaluation Criterion B.5, or any other evaluation criterion in NUREG-0654, is not necessarily required by the Commission's emergency planning regulations. Metropolitan Edison Co., et. al. (Three Mile Island Nuclear Station, Unit No. 1), ALAB-698, 16 NRC 1290, 1299 (1982), rev'd in part, on other grounds, CLI-83-22, 18 NRC 299 (1983). Like the

Commission's Regulatory Guides, NUREG-0654 has never been the subject of rule-making. Methods and solutions different from those set out in the guides are acceptable if they provide a basis for findings which must be made before a license or permit can be issued or continued. ALAB 698, 8 NRC 1290, 1298-99 (citations omitted).

The numbers in Tables 2.2-1 and 2.2-2 in the emergency plans for Shearon Harris represent the staffing levels the Applicant would adhere to in an emergency. It is no longer in dispute in this proceeding that, during an emergency, the Applicant would have an adequate number of people with the skills needed to meet the emergency.

The Intervenor argues, however, that the current plans do not make several of the people available soon enough. Intervenor's Reply at 1-3. The two just-mentioned tables in the plans reveal that the Applicant would have certain emergency stations manned within 30 to 45 minutes of the start of an emergency, and certain other stations within 60 to 75 minutes. However, the analogous table referred to by Evaluation Criterion B.5, Table B-1 at 37-38 in NUREG-0654, would have the same stations manned within exactly 30 and 60 minutes, respectively. The Intervenor argues that since a footnote to the emergency planning regulations in 10 C.F.R. § 50.47(b) says that the planning regulations are "addressed" by the evaluation criteria in NUREG-0654, the criteria have the legal force of regulations. Intervenor's Reply at 1.

As we have shown above, commission case law is to the contrary: The Staff will accept, and claims to have accepted in this case, reasonable deviations from the evaluation criteria. Staff Reply at 6-8. It is

arguable that it remains then to be determined by us whether in this case the Staff and the Applicant are being reasonable. The Applicants cite possible adverse weather as a reason for extending by at most 15 minutes the time within which certain stations would be manned in an emergency. Motion at 6. The Intervenor in effect argues that such weather would be good reason to man those stations 15 minutes earlier. These trivial differences do not rise to the level of a disputed material fact. By way of contrast, the two cases we cited earlier involved one time limit embodied in Table B-1 in NUREG-064 and at issue here. The Table calls for one of a licensee's senior managers to be in command of a licensee's Emergency Operations Facility within one hour, but the Licensee in that case proposed four hours. See CLI-83-22, 18 NRC 299. We find that the Applicants' proposed response times satisfy 10 C.F.R. § 50.47(b)(2).

Contention 154

The text of the contention is as follows:

> Plant operators are assigned to make the dose assessments (see Table 2.2.3, page 2) [in the Site Emergency Plan (SEP) Rev. 2]. These personnel are unqualified to make the detailed judgments that may be required by the procedures for dose estimating, given in Annex B of the SEP.

In an emergency, projections of offsite dose would be crucial determinants of what protective actions were taken. According to Annex

B, plant operators would perform dose assessments until the health physics staff had arrived. The Intervenor, Mr. Eddleman, asserts that

> [t]he complexity of judgment required in Annex B is beyond the training, as far as the SEP establishes, of ordinary reactor operators. Moreover, there are no educational or other requirements for operators that assure they will exercise good judgment in dealing with this complex task under the pressure of accident conditions, . . .

The Applicants' main argument is that, in an emergency, operators would follow not Annex B but the Plant Emergency Procedures (PEPs) contained in the Plant Operating Manual, Vol. 2, Bk. 5, that Annex B contains the technical background and justification for those procedures, but not the procedures themselves. Motion at 7. The Applicants also argue that since the contention is directed to Annex B under the misimpression that the contents of Annex B were to be construed as procedures, the Applicants have, strictly speaking, met their burden on summary disposition simply by pointing out that Annex B contains no procedures.

Nonetheless, the Applicants willingly assume, for the sake of argument, that the contention is directed to the procedures, and go on to argue that, between flow charts and "cookbook" descriptions of calculations, the procedures leave little room for judgment (Black affidavit, ¶¶ 5-10), and that, in accordance with the Commission's regulations and guidance on emergency planning, there are training programs, drills, and federally-evaluated, full scale exercises planned which will prepare the plant operators sufficiently to perform dose assessment under emergency conditions. Black affidavit, ¶¶ 12-17. The

Applicants report that the Staff has approved their training program. Id. ¶ 17.

The Intervenor replies principally that the Applicants nowhere in their motion argue that the operators are now -- on the date the Intervenor filed his reply -- trained to perform dose assessments (Intervenor's reply at 3-4), and secondarily, that the PEPs, though they may be simpler than Annex B, still leave too much room for judgment. The Intervenor cites as examples several details in one PEP. See id., "List of Facts in Dispute -- Contention 154".

Both of the Intervenor's arguments clearly amount to new contentions. The argument concerning the PEPs is new because the text of the contention is directed quite concretely to the form and substance of Annex B. That text, the contention says, is beyond the operators' competence.[1]

The Intervenor's principal argument is ambiguous, but, no matter which way it is read, it also is new. At first glance it appears to mean merely that operators should have been competent in dose assessment before the Applicants moved for summary disposition. The text of the contention, though, is about the complexity of Annex B, not the state of preparedness of the operators during litigation of the contention.

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1 Given the bar in Louisiana Power and Light Co. (Waterford, Unit 3), ALAB-732, 17 NRC 1076, 1107 (June 29, 1983) against litigating the myriad, often changing, details of implementing procedures, a contention on the PEPs might not have been admissible.

Moreover, there is no reason in law, or from good sense, for someone to be competent in dose assessment before that person needs to be, namely before the various scheduled tests of that competence.

By the argument that the motion must fail because the operators are not now trained, the Intervenor may intend something not apparent on the face of the argument, namely, that only health physics staff persons should do dose assessment, for only they would have had the long-standing, professional, specialized training which would enable them to perform dose assessments reliably in times of stress. This claim is far broader than the claim in the contention, which was simply that operators could not be expected to perform what appeared to be procedures in Annex B, not that the operators could not reliably perform for a short,[2] though stressful, time any conceivably adequate set of dose assessment procedures, no matter what the operators' training.

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2 Table B-1 at 37 in NUREG-0654, which, as we reported in our discussion of Contention 144, Mr. Eddleman would have us treat as law, calls for senior health physics expertise to be available with 30 minutes of the start of an accident.

OFFSITE EMERGENCY PLANNING

Eddleman Contentions 215(1) and 215(3)

The Texts of the contentions are as follows:

> In violation of 10 CFR 50.47(b)(10) CP&L's evacuation time study does not conform to NUREG-0654 Appendix 4 and will not provide accurate and useful guidelines for the choice of protective actions during an emergency because the study contains numerous so-called "conservatisms" including those referring to recreational populations and vehicle capacity factors (see e.g. sections 3-3 and 3-6) which may force evacuation time estimates upwards and provide inaccurate estimates for decisionmakers during an emergency, in the opinion of expert Paul Holmbeck. Potential hazards of such "conservatisms" are discussed in the 1984 Byron partial initial decision under emergency planning.
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> 1. The assumption of evacuation from home. For certain times of day, this assumption is unrealistic for many persons who will not be at home, but be at work, school, shopping, doctor's office, etc. This could also result in double counting of evacuees for persons who both live and work within the EPZ (6/14/84 Order at 31).
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> 3. The apparent assumption that those households without vehicles will automatically evacuate with neighbors (or can) at the rate of one vehicle per household.

We admitted contention 215 in our "Further Rulings on Admissibility of Offsite Emergency Planning Contentions . . .", June 14, 1984, at 24. However, we ordered that before the contention could be litigated, Mr. Eddleman would have to make it more specific. He did so on June 29, 1984, and we ruled on the specified contention, and the replies to it, on October 4, 1984, admitting parts (1) and (3) of the specified contention.

The Applicants filed for summary disposition of contention 215(1) on January 7, 1985, and for summary disposition of contention 215(3) on January 14, 1985. Accompanying each motion was an affidavit from Robert D. Klimm and one from Dr. Dennis S. Mileti.[3] Mr. Klimm is an Associate of HMM Associates, Inc., which has been under contract to the Applicants to perform the evacuation time study. Mr. Klimm's work includes management and supervision of such studies, and he was the Principal Transportation Engineer of the study for the Shearon Harris facility. He was also involved in the system development of the NETVAC computer model, which has been used in evacuation time studies at several nuclear power plants. Dr. Mileti is Associate Professor in the Department of Sociology at Colorado State University and Director of the Hazards Assessment Laboratory at the University.

The Staff replied in support of the motions on February 6, 1985 (on contention 215(1)) and February 27, 1985 (on contention 215(3)). Accompanying each of the Staff's replies was an affidavit from Dr. Thomas Urbanik II, Associate Research Engineer and Program Manager at the Texas Transportation Institute, part of the Texas A & M University System. Dr. Urbanik is also Lecturer in the Civil Engineering Department at the University. He subcontracts to Battelle Pacific Northwest Laboratories to assist them in their review for the NRC of

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[3] Dr. Mileti's affidavit on contention 215(1) was filed on January 10, 1985.

evacuation time estimates for nuclear power plants. He was principal author of NUREG/CR-1745, "Analysis of Techniques for Estimating Evacuation Times for Emergency Planning Zones", November 1980, and he has reviewed the initial evacuation time estimates for over 50 nuclear power plants. The results of his reviews appear in NUREG/CR-1856, "Analysis of Evacuation Time Estimates Around 52 Nuclear Power Plant Sites", May 1981.

The Intervenor, Mr. Wells Eddleman, replied in opposition to the Applicants' motions for summary disposition on February 15, 1985 (on contention 215(1)) and on March 11, 1985 (on contention 215(3)).

Contention 215(1): The Commission's regulations require applicants to make, and keep current, evacuation time estimates for use in an emergency, and NUREG-0654 contains quite detailed guidance for constructing such estimates. 10 C.F.R. Part 50, Appendix E, § IV, the introductory paragraph, says, among other things, that "[t]he nuclear power reactor operating license applicant shall also provide an analysis of the time required to evacuate and for taking other protective actions for various sectors and distances within the plume exposure pathway EPZ for transient and permanent populations." The requirement for such estimates stems ultimately from 10 C.F.R. § 50.47(b)(10), which says, in relevant part, that "[g]uidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place . . ." Evacuation time estimates are such guidelines, since, in a particular emergency, they would help determine whether evacuation were a practical alternative to sheltering. The Federal guidance

mentioned by the just-quoted regulation appears in NUREG-0654. There, the evaluation criteria which address the regulation say that the estimates shall be in accordance with Appendix 4 of NUREG-0654. See Evaluation Criteria J.8 and J.10.1. Though, as we have held elsewhere in this decision, NUREG-0654 generally does not have the legal force of regulations, the language of § 50-47(b)(10) that the guidelines shall be "consistent with Federal guidance", gives special force to the guidance on evacuation time estimates. No party to the litigation of these two contentions disputes that Appendix 4 to NUREG-0654 should govern our ruling on these two contentions. Indeed, both Intervenor and Applicants appeal to the guidance.

These evacuation time estimates are to be as realistic as is reasonably achievable. Although generally, when making estimates having to do with nuclear safety, it is prudent to incorporate conservatisms wherever the calculations are uncertain, it would be imprudent to be unnecessarily conservative in making an estimate of evacuation time, for an overestimate of sufficient magnitude could, in an emergency, lead those who must choose protective actions to avoid evacuation because they thought it would take too long when, in fact, it would have resulted in less exposure to radiation than sheltering would have. See Commonwealth Edison Company (Byron, Units 1 & 2), LBP-84-2, 19 NRC 36, 262-63 (1984).

The Applicants' motion for summary disposition of contention 215(1) stresses what they claim to be the reasonableness and realism of the disputed assumption in the time estimates that every resident of the

plume EPZ would evacuate from home. The Applicants' affiants report that experience with emergency evacuations and the literature on such evacuations support the assumption that residents of the plume EPZ will return home before evacuating. Klimm Affidavit, ¶ 6; Mileti Affidavit, ¶¶ 4, 7. Residents would return home principally, according to the affiants, to form families and other groups for mutual aid and protection. Id. The time estimates allot up to 2 hours for "preparation" for evacuation, and this figure, based on discussions with local officials, allows for returns home. Klimm Affidavit, ¶ 7. More than 20 evacuation time estimates use this assumption; most of these have been approved by the Staff, and the rest are under review. Id. ¶ 4. Indeed, the Applicants point out, the guidance in Appendix 4 of NUREG-0654 requires that the populations at recreational facilities, industrial facilities, and the like, be treated as separate from the permanent population of the EPZ. Klimm Affidavit, ¶ 5. See NUREG-0654, Appendix 4, at 4-2 to 4-3.

The Applicants argue that to the extent the assumption leads to double-counting at all, it makes the estimates not conservative but more realistic. Although many children who attend school in the EPZ also live there, their evacuating from school instead of from home would have an effect not on the number of cars used by those who evacuate from home, but only on the number of passengers in the cars, for parents, at least, would still be leaving from home, and -- goes the assumption which is the subject of contention 215(3) -- would still be using one car. Klimm Affidavit, ¶ 9. Thus the double-counting of some school

children does not entail a double-counting of cars, and since it is the count of cars which is a crucial factor in time estimates, the double-counting of school children cannot lead to an over-estimation of evacuation time.

Some double-counting of cars does occur in the time estimates in relation to permanent residents who also work within the EPZ or who would be in one of the recreation areas in the EPZ at the time of the accident. The estimates do count the cars of such residents twice, once as leaving from the place of employment or recreation, and once as leaving from home. However, although the cars are counted twice, the departures are not. Under the assumption that permanent residents, except for the school children among them, will evacuate from home, residents who before evacuating return home from employment, recreation, shopping, and the like, would be leaving both home and those places. Id. The assumption thus leads, the Applicants argue, to greater accuracy because it simulates, to a degree, the traffic "friction" (as the Applicants call it) caused by these departures toward home. Id.

The Staff agrees that the assumption of return home is supported by experience and the relevant literature, that Appendix 4 of NUREG-0654 says that the estimates are to treat residential populations separately from factory populations and the like, and that double counting school children who live in the plume EPZ cannot lead to an over-estimation of the number of cars that would be on the road. However, as to permanent residents who work in the EPZ or are otherwise away from home at the time of an accident, the Staff does not claim, or argue against the

claim, that such double-counting simulates traffic "friction". The Staff is content to say that no data exists which would enable the estimates to avoid such double-counting. Urbanik Affidavit at 2.

As happens too often with Intervenor Eddleman's replies to motions for summary disposition, his reply to this motion appears to be in fact a new contention, at least to the extent we are able to construe its aim. He no longer charges that there is anything unreasonable or conservative about the assumption of evacuation from home.[4] Rather he tries to raise new issues about the accuracy of the time estimates' "simulation" of the traffic "friction" caused by return home before evacuation. He claims that neither the estimates' double-counting nor the 2-hour preparation time they allot can accurately represent the traffic home before evacuation: The double-counting assumes that all cars counted would be leaving the plume EPZ, but at least some of the traffic home before evacuation would be against the flow of the traffic leaving the EPZ; and the number of hours alloted for preparation is

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4 It was unusual to have an intervenor arguing against such an assumption, since it is very like the claim so often advanced by intervenors in these proceedings, and advanced in contention 4(d) in this proceeding, that parents with children in school would pick them up before evacuating. Intervenors don't often claim that evacuation times have been over-estimated either. In fact it was also odd to have Applicants arguing such an assumption, since they usually claim that parents would not try to pick up their schools children before evacuating. The Applicants here avoid contradicting this usual claim by saying that families would unite -- unless they received sound public information to the contrary. See Mileti Affidavit, ¶ 7; see also our discussion of contention 4(d).

apparently only based on undocumented discussions with local officials, not on the traffic densities caused by trips home. Eddleman Reply, at 1-2.

The closest the Intervenor comes to maintaining the charge that double-counting leads to an overestimation of evacuation times is to assert that since the Staff claims that no data exist which could be used to avoid this double-counting, there is no way of telling how large it may be. However, this assertion fails to raise a litigable issue because it, as the rest of the reply, concerns the accuracy of the estimates' ways of accounting for traffic home, not any conservatism caused by an allegedly unreasonable assumption.

Moreover, even if the assertion that the double-counting may be quite large is construed as a claim that the the double-counting leads to an overly conservative estimate, the assertion still fails to raise a genuine issue about a material fact, for the absolute size of the double counting is irrelevant. Rather, what matters is the size of such double-counting relative to the traffic "friction" the Applicants claim to be simulating, and it might be expected that the larger the number of cars double-counted, the greater the "friction" to be simulated, since a larger number of permanent residents would be going home before evacuating.

Of course, as we have noted above, the failure of an opponent of a motion for summary disposition to show that there is a genuine issue of material fact does not, especially in proceedings involving health and safety questions, relieve the proponent of the motion of the burden to

show that there is no such issue. However, we believe that the Applicants have carried that burden here. The reasonableness of the assumption that permanent residents will evacuate from home is no longer at issue among the parties, and we see no reason that it should be. Moreover, the Applicants are, in this case, entitled to a favorable decision as a matter of law, for even if the assumption of evacuation from home results in some overestimation of the evacuation time,[5] the conservatism is hardly out of line with the law on this subject, Appendix 4 of NUREG-0654, which, though it cautions against over-counting (see Appendix 4 at 4-2), clearly permits a considerable over-estimation of the total evacuation time by permitting the assumption that each stage of the evacuation is wholly complete before the next stage begins, for instance, that no one begins to evacuate until everyone is prepared to do so. The authors of Appendix 4 acknowledge that this assumption, which was not used in the SHNPP time estimates, "tends to overestimate the evacuation time." Id. at 4-7. There is no indication that the double-counting in the SHNPP time estimates, which, as we have argued above, is a double-counting of cars, but not of departures, would lead to as high a degree of overestimation

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5 Arguably a possibility when some accommodation to those trips home is already made by the 2-hour allotment for preparation time.

as the assumption that each stage of the evacuation is complete before the next one begins.[6]

Contention 215(3): Appendix 4 of NUREG-0654 says that the time estimates, in determining how long it might take the permanent residents of the plume EPZ to evacuate, should divide the class of households of permanent residents into two sub-classes, one consisting of households with automobiles, and the other consisting of those without. The Appendix stresses that special attention must be given to those households not having automobiles. See NUREG-0654, Appendix 4 at 4-2 to 4-3, 4-9. The time estimates assume that the some 600 households without automobiles will evacuate at the rate of one vehicle per household, the same rate at which households with automobiles are assumed by the estimates to evacuate.

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6 Moreover, it appears that the law could not be otherwise on this issue, for the reason the Staff gives, that there are no data with which to avoid the double-counting here (Urbanik Affidavit, ¶ 5), by which, we take it, the Staff means not merely that the authors of the estimates have not gathered the data, but that they cannot be gathered. In theory it might be possible first to determine for every industry and office in the plume EPZ which employees live in the plume EPZ (Indeed, NUREG-0654, at 4-2 to 4-3, says to so determine, using employment data.) and how far they would have to go to get home, and then model both this pre-evacuation evacuation of residents and its interaction with the evacuation of non-residents and residents at home at the start of an accident. But, clearly, no comparable method is possible, even in theory, for recreational areas, shopping centers, and the like, for the modeler cannot know which patrons of these places at the time of an accident lived in the plume EPZ and how far they were from their homes. This same argument of the Staff's also runs against the Intervenor's call for greater accuracy in the simulation of the "friction" generated by trips home before evacuation.

The Applicants argue that this assumption is not a conservatism at all, but rather a practical means of simulating the traffic which would be generated by the friends, neighbors, or emergency workers who would provide transportation to those without automobiles. Applicants' Motion at 9; Mileti Affidavit, ¶ 2. Again as with the double-counting considered in Contention 215(1), cars might be double-counted, but departures might not be. The Applicants report that the assumption was reviewed with local emergency preparedness officials and "was determined" to be the most realistic means of simulating the traffic generated by people going to households which have no automobiles. Klimm Affidavit, ¶ 7. The Applicants also report that HMM Associates has used this assumption in the many estimates it has done for other nuclear power plants, and that the NRC Staff has thus far always accepted the assumption. Id., ¶¶ 3, 10. Affiant Klimm estimates that even if it were assumed that no vehicles were used in evacuating households which have no automobiles, there would be only at most 655 fewer automobiles evacuating and the evacuation time estimates would be reduced by no more than 10 minutes. Id., ¶ 9.

The Staff argues that the assumption at issue here is not the most realistic that could be made, since it amounts to an assumption that for each household without an automobile, one car will travel some distance to evacuate that household, that, in effect, each such household will be evacuated by taxi. However, the emergency plans contemplate more efficient means of providing transportation for these households. Urbanik Affidavit at 3. In any event, the Staff's Affiant Dr. Urbanik

concludes that any more realistic assumption would reduce the estimates by only 5 to 10 minutes, and that the present overestimation in the time estimates would not lessen the usefulness of the estimates in an emergency. Id.

In reply, the Intervenor, Mr. Wells Eddleman, attacks both the logic of the assumption and the Staff's conclusion that whatever overestimation the assumption entails is not significant and would not lessen the usefulness of the estimates. In regard to logic, the Intervenor argues that the assumption is not consistent with Affiant Mileti's claim that transportation for some of these households would be provided by neighbors, for, in this case, there is no extra traffic to be simulated. In regard to the significance of any overestimation the assumption may entail, the Intervenor argues that the Staff has not proved that the overestimation is not significant, or that it would not lessen the usefulness of the estimates in an emergency.

As with Contention 144, the Intervenor would have us go to hearing over a matter of a few minutes. He does not dispute that the minutes involved are no more than 10, yet he appears to think that the level of precision in evacuation time estimates is such that 10 minutes could be significant. Moreover, as with Contention 215(1), there may not be the data which would permit a less conservative assumption, for although a survey has been conducted which gave households without automobiles an opportunity to make their emergency transportation needs known, there is no sure way of knowing in advance of an emergency how many of those households would evacuate with nearby persons such as neighbors and how

many might require help from further away. Perhaps a range of possibilities might be set out, and some probabilities assigned within that range, but any possible gain in accuracy does not require an evidentiary hearing.

Contention 213-a

The text is as follows:

> Either each off-site ERP should contain an appendix which conforms to evaluation criterion II.P.7 of NUREG-0654 or it should be demonstrated that such an appendix is unnecessary because its functions are performed in some other way by the present form of the plans.

The average emergency plan "should consist of perhaps hundreds of pages, not thousands." NUREG-0654, Appendix 1, at 1-29. The plan should be such a length as to permit the whole planning scheme to be grasped in one view, and to permit a sound judgment on whether the plan can be implemented in an emergency. But a document of such relatively short length will not contain enough information for implementing the plan. The plan must therefore be supplemented with implementing procedures of often changing detail -- step-by-step procedures, lists of names and numbers and the like -- detail not suitable for inclusion in the plan itself, and seldom suitable for litigation before licensing boards (see Louisiana Power and Light Company (Waterford Unit 3), ALAB-732, 17 NRC 1076, 1106-07 (1983)). Such detail generally cannot be achieved until late in the planning. The implementing procedures for the onsite plan, for instance, can be submitted to the NRC as late as

180 days before the issuance of an operating license. 10 C.F.R. Part 50, Appendix E, § V.

Evaluation Criterion II.P.7 of NUREG-0654 says,

> Each plan shall contain as an appendix listing, by title, procedures required to implement the plan. The listing shall include the section(s) of the plan to be implemented by each procedure.

When we admitted the contention, we said, "Presumably the goal of P.7 is to assure not only that the implementing procedures are prepared in advance of plant operation above 5% of rated power, but also to assure coordination between the plans and the implementing procedures." And we might have added that the list P.7 calls for would also aid development and review (including periodic review) of the plan. Indeed, this latter consideration was very likely uppermost in the minds of the drafters of P.7, for the ultimate authority for the requirement for such an appendix is the planning standard on plan development and review, 10 C.F.R. § 50.47(b)(16): "Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained."

In August 1984, no appendix as called for by Evaluation Criterion P.7 was in either the State plan or any of the four county plans. Nor was it clear that the Applicants understood that such a plan might be required. For instance, Annex H of the plans, the Plan Cross Reference, cited as fulfilling P.7 either very general sections of the plan, such as "Concept of Operations", or other annexes dealing only with notification.

We therefore admitted the contention in our order, Carolina Power & Light Co., et al. (Shearon Harris, Units 1 and 2), LBP-84-29B, 20 NRC 389, 408-09 (1984). The Applicants moved for summary disposition on January 14, 1985. Accompanying the motion was an affidavit from Jesse T. Pugh, III, Director of the Division of Emergency management, in the North Carolina Department of Crime Control and Public Safety. Mr. Pugh is responsible for North Carolina's emergency planning and emergency response preparedness, for both nuclear and non-nuclear emergencies. The Staff filed in support of the motion on February 27, 1985. Accompanying the Staff's filing was an affidavit from Thomas I. Hawkins, Emergency Management Program Specialist for the Federal Emergency Management Agency (FEMA), and FEMA Region IV Liaison with both South and North Carolina. The Intervenor, Wells Eddleman, replied in opposition to the motion on March 11, 1985.

The Applicants argued that the level of detail in the plans, together with the existence of standard operating procedures at the state and county levels, made an Appendix linking the implementing procedures and the plans unnecessary. See LBP-84-29B, 20 NRC 389, 409 (1984).

But the Applicants' principal argument, with which the Staff agrees, is that Attachment 2 to each of the five plans meets the requirement of Evaluation Criterion P.7. Attachment 2 to the State plan may be taken as typical of the other four such attachments. It lists by title five emergency plans and their sources -- as, for instance,

"Southern Mutual Radiation Assistance Plan", the source of which is the Southern States Energy Board. The attachment also lists three sets of Standing Operating Procedures (SOPs) and their sources -- as, for instance, "State Emergency Response Team Standing Operating Procedures", the source of which is the North Carolina Division of Emergency Management, DCCPS. The Applicants concede that, as presently constituted, these Attachments do not, as P.7 would have them do, list the plan sections being implemented by the listed plans and SOPs, but the Applicants nonetheless argue that P.7 is satisfied by the fact that the titles of the plans and SOPs indicate the plan sections they implement. For instance, the Emergency Operating Center SOPs clearly indicate the part of the State plan which has to do with the functions of the Emergency Operating Center.

We believe that the listings in the various Attachment 2s are much too general to be of much use as cross-references between the plans and the implementing procedures. Rather, those Attachments are clearly intended to satisfy Evaluation Criterion P. 6, which says, "Each plan shall contain a detailed listing of supporting plans and their source." Indeed, Annex H, the Plan Cross Reference, explicitly identifies the various Attachment 2s as satisfying P.6, not P.7.

In response to the Applicants' argument, the Intervenor quite rightly says that the assumption upon which the contention is based -- that P.7 has not yet been satisfied -- is true. Nonetheless, we are granting the motion for summary disposition, but we are also imposing a condition -- to be set out in a moment -- on the issuance of the

full-power license. Despite the Applicants', the Staff's, and FEMA's attempts to persuade us that the various Attachment 2s satisfy Evaluation Criterion P.7, we believe that the Applicants grasp the meaning of P.7 and understand that each Attachment 2 falls short of what P.7 calls for, not only in the amount of detail in the lists in the Attachment, but also in not explicitly citing sections of the plan. The Applicants do not argue that such cross-references as P.7 calls for would not be useful, or that the goals of P.7 are met by some alternative comparable in the amount of detail and degree of explicitness to what P.7 calls for. Indeed, the Applicants explicitly commit, in the course of the motion (see Motion at 10; Pugh Affidavit, ¶ 7), to satisfying P.7 fully by the time of the full-scale exercise of the emergency plans, which, at the time of the motion, was scheduled for May of this year.

We secure this commitment by imposing its fulfillment as a condition of the issuance of a full-power license. The Staff is charged with determining that before the issuance of a full power license there has been added to the State plan and each of the county plans an appendix listing the implementation procedures for that plan. The listing must be in at least as much detail as the list of titles of Corporate Emergency Plan Implementation Procedures (CEPIP) in the October 1984 onsite plan, but each Appendix must also cite by section, or sections, the parts of the plan the listed procedures implement. This condition is clear and straight forward and thus we believe we can assign oversight of its completion to the Staff, without running afoul

of the delegation doctrine as developed in NRC case law. See Southern California Edison Co. (San Onofre Station), LBP-82-39, 15 NRC 1163, 1216-1217 (1982); Commonwealth Edison Co. (Byron, Units 1 and 2), LBP-84-2, 19 NRC 36, 209-13 (1984). Therefore there is nothing left to litigate under this contention.[7]

Contention 30

The text of the contention is as follows:

> The plan's provisions (Part 1 pp. 49-50) for Potassium Iodide do not comply with the requirements of NUREG-0654 II.J.10.e (pg. 63) that the plans must include "quantities" for persons whose "evacuation may be infeasible or very difficult" who are in the plume EPZ.

The full text of the evaluation criterion the contention cites is as follows:

> 10. The organization's plans to implement protective measures for the plume exposure pathway shall include:
>
> . . . . . .
>
> e. Provisions for the use of radioprotective drugs, particularly for emergency workers and institutionalized persons within the plume exposure EPZ whose immediate evacuation may be infeasible or very difficult, including quantities, storage, and means of distribution.

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7 The Intervenor complains in his reply that it is clear that some implementing procedures are not in the plans, and that some sections of the plans which require implementing procedures may not yet have them. As we said when we admitted this contention, there is no requirement that the implementing procedures be in the plans. To the contrary, see LBP-84-29B, 20 NRC at 408. Nor is there any deadline for the drafting of procedures other than the natural

(Footnote Continued)

. . . . . .

The authority for this criterion is the planning standard in 10 C.F.R. § 50.47(b)(10), which says, among other things, that "[a] range of protective actions have [sic] been developed for the plume exposure pathway EPZ for emergency workers and the public."

Section IV.E.6 of the State plan assigns to the Division of Health Services the task of determining how much Potassium Iodide (KI) would be required in an emergency, but no provision in the plan says what amount of KI would be enough. We admitted the contention because we wondered whether the evaluation criterion in question shouldn't be read more literally, since NUREG-0654 often calls for definite quantities to be included in the plans. Presumably, the purpose of such calls is to make sure that the quantities are determined during, not after, the planning process. "Further Rulings on Admissibility of Offsite Emergency Planning Contentions", June 14, 1984, at 21-22.

The Applicants filed for summary disposition on January 14, 1985. Accompanying the motion was an affidavit from Charles D. Reed, Pharmacist in the Adult Health Services Section of the Division of Health Services of the North Carolina Department of Human Resources. Mr. Reed has responsibility for the coordination of, and planning for, the procurement, storage, and distribution of KI for use in an

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(Footnote Continued)
deadline imposed by the full-scale exercise of the plans. What we seek is reasonable assurance that P.7 will be satisfied.

emergency. The Staff responded in support of the motion on February 2, 1985. Accompanying the Staff's response was an affidavit from Thomas I. Hawkins, who, as we have reported before, is Emergency Management Program Specialist for the Federal Emergency Management Agency (FEMA) and the FEMA Region IV Liaison to South and North Carolina. The Intervenor, Mr. Wells Eddleman, replied in opposition to the motion on March 11, 1985.

The Applicants argue that it is cumbersome to keep the plans up-to-date on the quantities of KI required and stored, that these quantities are, for a number of reasons, among them changes in population density, subject to frequent change. Reed Affidavit, ¶ 6. The Applicants are, in effect, arguing that the information called for by J.10.e belongs in an implementing procedure, not in a plan. And, in fact, the State appears to treat this information, and related information, very much in the manner in which it treats implementing procedures: Affiant Reed reports that the Division of Health Services frequently distributes to State and local officials up-dated names of the locations where KI is stored, the quantities of KI stored at each location, and the names, addresses, and telephone numbers of the persons with access to the KI stored at each location. Reed Affidavit, ¶ 6.

The Applicants argue in the alternative that the quantities of KI which would be needed in an emergency have, in fact, been determined. Reed Affidavit, ¶ 2. As we said above, to assure that such a determination was made early on in the planning was the point of Evaluation Criterion J.10.e. No party to this proceeding has argued

otherwise. When dealing with an evaluation criterion, the aim of the criterion is more important than the letter, since an applicant's compliance with a criterion is not required if the applicant can show that there is another way to satisfy the aim of the criterion. See Metropolitan Edison Co. et al. (Three Mile Island, Unit 1), ALAB-698, 16 NRC 1290, 1298-99 (1983) (citations omitted).

The Intervenor now proposes that we litigate the adequacy of the quantity the State has determined it would need in an emergency. Intervenor's reply at 5. Again, the Intervenor is proposing a new contention, one which could have been timely filed and a basis for it proffered. The Intervenor proffers none now.

Emergency Planning Joint Contention EPJ-1

The text is as follows:

> Insufficient consideration has been given in the off-site Emergency Plans to the effects of severe snow and ice conditions on evacuation times and/or capabilities to clear evacuation routes.
>
> Section IV.E.8 of the State plan (at 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.

We admitted this contention during the May 2, 1984 prehearing conference, at Tr. 974-75, 993-96. The Applicants filed their motion for summary disposition on December 10, 1984. Accompanying the motion were three affidavits. Affiant Brian D. McFeaters is Project Scientist and Meteorological Supervisor with Applicant Carolina Power and Light

Company. He has direct supervisory responsibility for all meteorological studies, monitoring, and assessment in that Applicant's Operational Training & Technical Services Department. Affiant M.C. Adams is Manager of the Maintenance and Equipment Branch of the Division of Highways, in the North Carolina Department of Transportation. He has responsibility for overseeing and maintaining the roads throughout the state, including those in the counties which overlap the plume exposure pathway EPZ. The third affiant was Robert D. Klimm, whose professional qualifications we briefly describe in our discussion of contention 215.

The Staff and the Federal Emergency Management Agency (FEMA) filed a joint response in support of the motion on January 16, 1985. Accompanying the response were two affidavits, from Dr. Thomas Urbanik II and Thomas I. Hawkins. We briefly describe the professional qualifications of both men elsewhere in this decision, of Dr. Urbanik in our discussion of Contention 215, and of Mr. Hawkins in our discussion of Contention 213-a. Intervenor CHANGE replied in opposition to the motion on March 11, 1985. Co-sponsoring Intervenors were Dr. Richard D. Wilson and the Conservation Council of North Carolina (CCNC). We had designated CCNC as lead intervenor. See Carolina Power and Light Co., et al. (Shearon Harris Units 1 and 2), LBP-84-29B, 20 NRC 389, 420 (1984).

Section IV.A of NUREG-0654, Appendix 4 calls for evacuation time estimates to be calculated for at least two weather conditions, normal and adverse. There cannot possibly be an estimate calculated for every possible weather condition. Rather, in order to give those who would

have to choose between sheltering and evacuation some reliable notion of the effect of adverse weather on evacuation times, the estimators must choose an adverse condition which is both severe and not too infrequent in the plume EPZ under consideration. Id. The requirement for such estimates is in 10 C.F.R. Part 50, Appendix E, § IV, the introductory paragraph, and the ultimate source for the requirement is 10 C.F.R. § 50.47(b)(10), which says, in relevant part, "A range of protective actions [has] been developed for the plume exposure pathway EPZ . . ."

The adverse weather assumed in the Applicants' time estimates is a severe rainstorm. Snow storms are too infrequent around Shearon Harris to be usefully assumed in a time estimate. On average, each year only 7.5 inches of snow falls in that area of North Carolina, 2.5 of those inches in January, and 2.4 inches in February. McFeaters Affidavit at 2. Moreover, on average each year there are only four days in which there is any freezing rain. Id. at 3. However, the population of the plume EPZ is at its highest in the fall, when adverse weather of any severity is likely to be in the form of rain. Urbanik Affidavit, ¶ 4.

Nonetheless, the State is well-prepared to clear the roads for evacuation in a snow-storm, if evacuation were to be the dose-saving protective action under such circumstances. The North Carolina Department of Transportation maintains close communciation with the National Weather Service and has crews on standby around the clock in every county which overlaps the EPZ. The Department has 50 pieces of equipment in those counties -- one piece for every 12 miles of highway in the plume EPZ -- assigned for use in a general emergency caused by an

accident at the plant. Adams affidavit at 2-4. Thus, if such an emergency were to coincide with a large snowstorm, the Department would be prepared to begin simultaneous clearing of all the roads in the plume EPZ -- and of the major evacuation routes outside the plume EPZ -- when the first snow fell. Id.

Affiant Adams estimates that, for any storm dumping up to six inches of snow, it would take between 2.5 and 4 hours to clear all the roads needed for evacuation. In that time, every major U.S. or state road in the plume EPZ, and every major route beyond the ten-mile zone and leading to an evacuation shelter, could be scraped twice, and every other road within the ten-mile limit scraped once. Adams Affidavit at 3-4.

In its reply to the motion, CHANGE raises no objection to the adverse weather assumptions in the time estimates, and moreover says that "[i]t appears that the concerns of the contention have been adequately addressed, insofar as it addresses the effects of snow and ability of the State to clear the snow and ice from the roads." However, CHANGE goes on to say that "[i]mplicit in the contention . . . is the effect of snow and ice on the ability of drivers of poorly equipped cars to deal with treacherous cond'tions and the ensuing difficulty in effectively clearing roads within the time parameters specified." The issue CHANGE raises here is new in this proceeding and can have no effect, either procedural or substantive, on our ruling on summary disposition. Moreover, the issue is late and pleaded without basis, and it has no bearing on the adequacy either of the evacuation

time estimates -- about which CHANGE now raises no objection -- or the adequacy of the State's preparations for clearing the roads of snow and ice.

Emergency Planning Joint Contention 4(a)

The text of the contention is as follows:

> Section E4d of State Procedures (p. 47) is deficient because -- Fifty percent of school bus drivers are high school juniors and seniors (as young as 16 ½ 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.

Of the 75 drivers planners judge would be needed to evacuate the public and private schools in the plume EPZ, about 66 would be high school students licensed to drive school buses. Pugh Affidavit, ¶ 3. We admitted the contention in Carolina Power and Light Co., et al. (Shearon Harris Units 1 & 2), LBP-84-29B, 20 NRC 389, 420-21 (1984). Cosponsoring intervenors were Dr. Richard D. Wilson and CHANGE. We designated CHANGE as the lead intervenor.

The Applicants filed for summary disposition on January 11, 1985, with affidavits from Jesse T. Pugh III, and Dr. Dennis S. Mileti. We briefly describe the professional qualifications of Mr. Pugh in our discussion of contention 213a, and of Dr. Mileti in our discussion of contention 215. The Staff and the Federal Emergency Management Agency (FEMA) responded in support of the motion on February 27, 1984, with an

affidavit from Thomas I. Hawkins, whose professional qualifications we briefly describe in our discussion of contention 213a. CHANGE replied in opposition to the motion on March 11, 1985.

The Applicants' argument, in a nutshell, is that the emergency tasks of the school bus drivers would be little different from the tasks they competently perform daily during the school year, that they will be well-informed about what would be expected of them in an emergency, and that there is no evidence in the historical record of emergency response to suggest that high school students would not perform their assigned roles.

Daily during the school year, in all kinds of weather, school bus drivers who are students drive students of all ages to and from the schools in the plume EPZ. Pugh Affidavit, ¶ 4. The student drivers' competence for these daily tasks is assured by regulations issued by the State Department of Public Education. These regulations set out standards for the student driver's health, vision, hearing, size, strength, age, character, and attitude. Motion at 5. Prospective drivers must also take a training course in driving school buses.

In an emergency caused by an accident at the Shearon Harris plant the school bus drivers would, as they do daily, pick students up at the schools and drop them off somewhere else, at assigned shelters in the case of an emergency. At least one school staff member would be on each bus to supervise the student passengers. Pugh Affidavit, ¶ 7. Neither student drivers nor adult ones would be asked to return to the EPZ; after arriving at the shelters the student drivers would be free to join

their parents. Pugh Affidavit at 4n.2; ¶ 6. Thus the student drivers would have faced no greater risk of exposure to radiation than their passengers would have, and very likely less risk than the general public would have faced, since the schools would probably receive notification for evacuation sooner than the general public would. Id. ¶ 6.

For these emergency tasks so little different from their non-emergency tasks, the school bus drivers, both student and adult, will receive adequate training. They will know which shelter they should drive to, and what route to take to get there. Id. ¶ 8. They will be instructed in certain concepts about radiation. Id. They will be given some overview of the emergency plans so that they will be able to understand better their own role in the plans. Id. And they will be urged to discuss their roles with their families so that they and their families can make arrangements which are consistent with the roles the driver would play in an emergency. Id. The plans also provide for refresher training. Id. Affiant Dr. Mileti claims that the historical record on emergency response shows that persons well-trained in their emergency roles perform them well in time of emergency and that high school students have demonstrated a particular willingness to perform emergency roles. Mileti Affidavit, ¶ 5. He also argues that student drivers, being neither parents nor spouses, would be less likely than older drivers would be to be caught between conflicting duties. Id. ¶ 3-4.

The Applicants also argue that requiring parental authorization for student drivers to perform their roles in an evacuation would not

increase the reliability or the quality of the performance of the student drivers, and therefore would not contribute to the health and safety of the students who would be passengers on the buses. Motion at 11-12. Nor, the Applicant argues, would such authorization contribute to the health and safety of the drivers themselves, for even if they were not permitted to drive the buses, they would still ride in them and thus would face exactly the same risks of exposure to radiation their fellow students would. Id. at 11. The Applicants also point out that State law expressly authorizes the use of school buses "for emergency management purposes," but neither State statutes nor regulations require parental authorization for student bus drivers to drive the buses in an emergency. Id. at 6 (citing North Carolina Gen. Stat. sec. 115C-242(6)).

CHANGE replies with what amount to four arguments. First, it claims that Applicants' Affiant Dr. Mileti "assumes", when predicting that high school students would perform their roles well, that they will be trained in those roles. Given Mr. Pugh's affidavit and the relevant provisions of the plans, we fail to see what is questionable about this assumption. CHANGE argues second that the State Department of Public Education regulations on the qualifications of school bus drivers "appear to be at most . . . paper requirements[s] of little reliability or application in emergency conditions." CHANGE proffers no basis for this claim. CHANGE grants that "the reliability and quality of a driver's performance may not be dependent on parental authorization", but CHANGE nonetheless asserts that "parental authorization and approval

are certainly important in considering issues of this nature." How important in considering which issues of what nature CHANGE does not say. CHANGE last asserts its "general experience" of students of high school age against Dr. Mileti's "general experience" of students that age, and thus invites us to prefer undocumented, unsworn claims to sworn affidavits summarizing scholarship. Again, "[a] party opposing the motion may not rest upon the mere allegation or denials of his answer; his answer by affidavits or as otherwise provided in this section must set forth specific facts showing that there is a genuine issue of fact." 10 C.F.R. § 2.749(b).

Contention 4(d)

The text of the contention is as follows:

Section E4d of State Procedures (p. 47) is deficient because --

Most parents would 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.

The co-sponsors of this contention are Dr. Richard D. Wilson, Mr. Wells Eddleman, and CHANGE. We designated CHANGE as the lead intervenor. See Carolina Power and Light Co., et al. (Shearon Harris, Units 1 & 2), LBP-84-29B, 20 NRC 389, 421 (1984).

The Applicant moved for summary disposition on January 14, 1984, with affidavits from Jesse T. Pugh III, Dr. Dennis Mileti, and Robert D. Klimm. We briefly describe the professional qualifications of all three

men elsewhere in this decision, of Mr. Pugh in our discussion of contention 213-a, and of Dr. Mileti and Mr. Klimm in our discussion of contention 215. The Staff and the Federal Emergency Management Agency (FEMA) filed a joint response in support of the motion on February 27, 1984, with an affidavit from Thomas I. Hawkins, whose professional qualifications we briefly described in our discussion of contention 213-a. CHANGE replied in opposition to the motion on March 11, 1984.

The Applicants argue first that the evacuation of the schools would probably be well under way by the time parents and other members of the general public received notification of a general evacuation, since notification to the schools, both public and private, would precede, to some extent, notification to the general public, and the buses and drivers needed for evacuation of a given school would already be at the school as a matter of daily routine, or at least at a nearby school. Pugh Affidavit at 3.

The Applicants argue second that parents well-informed about what is being done for their childrens' safety would not be likely to try to pick their children up at school. According to Dr. Mileti, if parents are informed well in advance about the plans' provisions for the evacuation of their children, and informed at the time of an emergency that those provisions are being carried out and that parents should proceed to the shelter assigned them, there is no reason, in light of the historical record on the response of the public in general emergencies, to expect what some choose to call the "thin veneer of civilization" to be stripped away and parents to show up in great

numbers at the schools, in panic and needing to be subdued by police. Mileti Affidavit at 3-4. Affiant Pugh reports that parents will indeed be informed about plans for the evacuation of school children; the public information brochures to be distributed throughout the plume EPZ will describe those plans, as will planning personnel at Parent-Teacher Organization meetings at every school in the plume EPZ. Pugh Affidavit at 4n.2; ¶ 4. In the event of an emergency, the Emergency Broadcast System would inform parents about the evacuation of the schools, report the names of the shelter to which each school's students had been evacuated, and urge parents not to try to pick their children up at school. Id. at 3.

Nonetheless, the plans make some provision for parents' trying to unite with their children before evacuation. Parents who do go to the schools will, of course, be permitted to pick up their children. Id., at 5n.3. Personnel at each school will be trained to deal with the traffic. All the schools in the plume EPA have multiple entrances and exits, with the entrances parents normally use to pick their children up separate from exits the buses normally use. Id. ¶ 6. Affiant Klimm says that although the evacuation time estimates were not calculated with the possibility in mind that parents would try to go to the schools, such trips to the schools would not invalidate the estimates, for the estimates allot ample times for preparation and mobilization, and the double-counting discussed in contention 215 leaves some room for the traffic "friction" caused by parents' going to the schools. Klimm Affidavit at 3.

Inexplicably, CHANGE construes the Applicants' first argument to assume that the schools would be evacuated before parents arrive at them. CHANGE's only other argument is that we have received testimony at a limited appearance session from parents who said they would probably try to pick their children up at school. Thus we are invited to set aside, on the basis of brief, unsworn testimony about what the testifier thought he or she might do in a general emergency, sworn affidavits about how people have in fact behaved in general emergencies. "A party opposing the motion may not rest upon the mere allegation or denials of his answer; his answer by affidavits or as otherwise provided in this section must set forth specific facts showing that there is a genuine issue of fact. 10 C.F.R. § 2.749(b).

THE ATOMIC SAFETY AND LICENSING BOARD

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