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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
CAROLINA POWER & LIGHT COMPANY	)	Docket Nos. 50-400 OL
and NORTH CAROLINA EASTERN	)	50-401 OL
MUNICIPAL POWER AGENCY	)	
	)	
(Shearon Harris Nuclear Power	)	
Plant, Units 1 and 2)	)	

APPLICANTS' ANSWER TO EDDLEMAN PROPOSED CONTENTIONS ON SHNPP EMERGENCY RESPONSE PLANS

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April 28, 1984

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APPLICANTS' ANSWER TO EDDLEMAN
PROPOSED CONTENTIONS ON SHNPP
EMERGENCY RESPONSE PLANS

In Wells Eddleman's Partial Response and Contentions re Emergency Plan (Offsite), dated April 3, 1984, Mr. Eddleman amended two proposed onsite emergency planning contentions (Contentions 151 and 157) previously deferred by the Board. In addition, Mr. Eddleman proposed six new contentions, assertedly based upon the North Carolina Emergency Response Plan In Support of the Shearon Harris Nuclear Power Plant (the ERP), dated February 1984. Pursuant to several extensions of time, Wells Eddleman's Contentions on the Emergency Plan (2d Set) were filed April 12, 1984. In that document, Mr. Eddleman submitted "as is" for ruling some previously deferred proposed contentions, "revised" 33 proposed contentions, and filed yet an

additional 41 new proposed contentions -- all assertedly based on the ERP.

APPLICABLE STANDARD FOR ADMISSIBILITY OF CONTENTIONS

Applicants have previously discussed at length the general legal standards governing the admissibility of proposed contentions in an NRC licensing proceeding. See, e.g., "Applicants' Response to Supplement to Petition to Intervene by Wells Eddleman" (June 15, 1982), at 2-19. Accordingly, there is no need to restate in full the Commission's requirements; rather, Applicants simply summarize here the general principles to be applied in determining the admissibility of the Eddleman proposed off-site emergency response contentions (as well as the two pending proposed onsite contentions).

1. Scope of Hearing Notice

A threshold requirement for an admissible contention is that it address a matter which is within the scope of the issues set forth in the Commission's Notice of Opportunity for Hearing in this proceeding. See Northern Indiana Public Service Co. (Bailly Generating Station, Nuclear 1), ALAB-619, 12 N.R.C. 558, 565 (1981); Portland General Electric Co. (Trojan Nuclear Plant), ALAB-534, 9 N.R.C. 287, 289-90, n.6 (1979); Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 N.R.C. 167, 170-71 (1976).

2. Bases with Reasonable Specificity

The Commission's Rules of Practice, at 10 C.F.R. § 2.714(b), further require that an intervenor include with proposed contentions "the bases for each contention set forth with reasonable specificity."

There are several purposes which underlie the Commission's standard in section 2.714(b):

> A purpose of the basis-for-contention requirement in Section 2.714 is to help assure at the pleading stage that the hearing process is not improperly invoked. For example, a licensing proceeding before this agency is plainly not the proper forum for an attack on applicable requirements or for challenges to the basic structure of the Commission's regulatory process. Another purpose is to help assure that other parties are sufficiently put on notice so that they will know at least generally what they will have to defend against or oppose. Still another purpose is to assure that the proposed issues are proper for adjudication in the particular proceeding. In the final analysis, there must ultimately be strict observance of the requirements governing intervention, in order that the adjudicatory process is invoked only by those persons who have real interests at stake and who seek resolution of concrete issues.

Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 A.E.C. 13, 20-21 (1974) (footnotes omitted).

The notice aspect of the "bases with reasonable specificity" requirement is a natural outgrowth of fundamental notions of fairness applied to the party with the burden of

proof. The Atomic Safety and Licensing Appeal Board has observed:

> The applicant is entitled to a fair chance to defend. It is therefore entitled to be told at the outset, with clarity and precision, what arguments are being advanced and what relief is being asked . . . . So is the Board below. It should not be necessary to speculate about what a pleading is supposed to mean.

Kansas Gas and Electric Co. (Wolf Creek Generating Station, Unit No. 1), ALAB-279, 1 N.R.C. 559, 576 (1975) (emphasis supplied; footnote omitted). Moreover, the Licensing Board is entitled to adequate notice of a petitioner's specific contentions to enable it to guard against the obstructionism of its processes. As the Supreme Court has noted, in NRC proceedings,

> * * * it is incumbent upon intervenors who wish to participate to structure their participation so that it is meaningful, so that it alerts the agency to the intervenors' position and contention.* * *
>
> Indeed, administrative proceedings should not be a game or forum to engage in unjustified obstructionism by making cryptic and obscure reference to matters that "ought to be" considered * * *.

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 553-54 (1978).

Yet, important as the notice aspect of the standard is, the requirement for bases with reasonable specificity goes beyond the "notice pleading" allowed in the federal courts, which has been found to be insufficient for NRC licensing

proceedings. See Wolf Creek, supra, ALAB-279, 1 N.R.C. at 575, n.32 (1975). On the other hand, the regulation does not require the intervenor to detail the evidence which will be offered in support of each proposed contention. Peach Bottom, supra, ALAB-216, 8 A.E.C. at 20 (1974); see also Mississippi Power and Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 A.E.C. 423, 426 (1973); Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 N.R.C. 542, 548-49 (1980). In short, the standard falls somewhere in between, and "[t]he degree of specificity with which the basis for a contention must be alleged initially involves the exercise of judgment on a case-by-case basis." Peach Bottom, supra, 8 A.E.C. at 20 (1974).

There also are certain practical considerations which should play a particularly important role here in the Board's application of the "bases with reasonable specificity" standard to a particular proposed contention -- beyond the question of whether the proposed contention provides clear and precise notice of the issues on which Applicants may bear the burden of proof. First, the contention should refer to and address pertinent documentation, available in the public domain, which is relevant to this facility. See Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), LBP-81-24, 14 N.R.C. 175, 181-84 (1981). In the instant case, the Board deferred ruling on emergency planning contentions filed prior to

availability of the emergency plans, pending service of the plans themselves, and accorded intervenors the opportunity to file refined and additional contentions after reviewing the plans. See LBP-82-119A, supra, 16 N.R.C. at 2070-73 (1982). An emergency planning contention "should be required to specify in some way each portion of the plan alleged to be inadequate. . . . [W]ithout an adequately particularized contention setting forth how the 'local conditions' referenced in [the contention] are alleged to affect every aspect of [the] plan, we are left to speculate how [Applicant's] alleged failure to consider these local factors is supposed to render each aspect of its plan inadequate." Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-82-75, 16 N.R.C. 986, 993 (1982). Thus, the requirement for specific reference to relevant documentation applies with special force to the ERP, but may also include applicable NRC Staff regulatory guides and other published reports. In addition, there should be either a reasonably logical and technically credible explanation, or a plausible and referenced authority for the factual assertions in the contentions. The intervenor's personal opinion alone is not adequate for this purpose.

In this regard, Applicants have an objection that is applicable to numerous Eddleman offsite emergency response contentions. Rather than repeating this objection in response to each of the contentions, Applicants state the objection here,

and will only refer to it in specific, egregious instances. Many of the Eddleman contentions are no more than broad and unsupported allegations that the offsite emergency response plan is inadequate in its treatment of a particular matter. In many instances, Mr. Eddleman neglects to identify specific defects or inaccuracies, and fails to provide citations to the ERP or other reference documents. Most of the contentions fault the ERP for its failure to include or consider a fact or an issue; however, often no supporting rationale is offered as to why this fact or issue should be considered. Such bald assertions, unsupported by factual detail or supporting legal basis, fail to meet the "bases with reasonable specificity" requirement of 10 C.F.R. § 2.714(b).

3. Challenges to Regulations

All rules and regulations of the Commission, and the underlying bases for those rules and regulations, are immune to attack in an individual licensing proceeding unless a petition is first made to the Licensing Board for an exception of waiver. The sole ground for a petition for waiver or exception shall be that special circumstances with respect to the subject matter of the particular proceeding are such that application of the specific challenged rule or regulation (or provision thereof) would not serve the purposes for which the rule or regulation was adopted. The petition must be accompanied by an affidavit in support of that basis for the petition.

Opportunity is provided for other parties to respond to the petition, including the submission of reply affidavits. If the Licensing Board determines that a prima facie showing has been made in support of waiver or exception, it shall, before ruling, certify directly to the Commission for a determination on the matter. If the Licensing Board does not determine that such a prima facie showing has been made, it must deny the petition. 10 C.F.R. § 2.758; Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 A.E.C. 79, 89 (1974).

THE EDDLEMAN CONTENTIONS

PLUME EPZ

Proposed Contentions 57-C-15, 57-C-17, 201 and 202 each assert that the 10-mile plume exposure EPZ is inadequate, and rely exclusively on NUREG/CR-2239, Technical Guidance for Siting Criteria Development (D.C. Aldrich, et al., Sandia National Laboratories, November 1982). Contention 201 suggests a 25-mile EPZ.1/

1/ While 57-C-15 does not explicitly reference the EPZ, it asserts the need to relocate (i.e., evacuate) persons already evacuated to beyond the EPZ. In addition, the proposed contention overlooks the relative ease of relocating an assembled population (at shelters) when response organizations are fully activated.

These proposed contentions represent a clearly impermissible attack on Commission regulation 10 C.F.R. § 50.47(c)(2), which specifies that the plume exposure pathway EPZ shall consist of an area about 10 miles in radius. See, in this proceeding, LBP-82-119A, 16 N.R.C. 2069, 2082 (rejecting CHANGE 3), 2084 (rejecting CHANGE 46(e)-(f)); 10 C.F.R. § 2.758.

Further, Applicants note that nothing specific to the Harris site and its environs is raised in these contentions. They would simply establish a new generic basis for the Commission's emergency response regulations.

The basis for establishing the size and nature of the EPZs set forth in Commission regulations is contained in, inter alia, NUREG-0396, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants"; EPA 520/1-78-016 (December 1978). Appendix E to 10 C.F.R. Part 50, note 2. NUREG-0396 was developed by a task force composed of recognized NRC and EPA experts on the effects of radioactivity. In recommending the size and nature of the EPZs, this planning document specifically recognized the possibility of a range of accidents including worst case Class 9 accidents.

> The EPZ recommended is of sufficient size [10 mile radius] to provide dose savings to the population in areas where the projected dose from design basis accidents would be expected to exceed the applicable PAGs [Protective Action Guidelines] under

> unfavorable atmospheric conditions * * * * [C]onsequences of less severe Class 9 accidents would not exceed the PAG level outside the recommended EPZ distance. In addition, the EPZ is of sufficient size to provide a substantial reduction in early severe health effects (injuries or deaths) in the event of the more severe Class 9 accidents. [NUREG-0396, at 16-17.]

Appendix I of NUREG-0396 further explained that the 10 mile EPZ was designed to provide full protection to the public in the event of any Class 9 accident.

> Class 9 accidents cover a full spectrum of releases * * * * The lower range of the spectrum would include accidents in which a core "melt-through" of the containment would occur * * * * [T]he doses from "melt-through" releases * * * generally would not exceed even the most restrictive PAG beyond about 10 miles from a power plant. The upper range of the core-melt accidents is categorized by those in which the containment catastrophically fails and releases large quantities of radioactive materials directly into the atmosphere because of over-pressurization or a steam explosion. These accidents have the potential to release very large quantities * * * of radioactive materials. There is a full spectrum of releases between the lower and upper range with all of these releases involving some combination of atmospheric and melt-through accidents. These very severe accidents have the potential for causing serious injuries and deaths. Therefore, emergency response for these conditions must have as their first priority the reduction of early severe health effects. Studies have been performed which indicate that if emergency action such as sheltering or evacuation were taken within about 10 miles of a power plant, there would be significant savings of early injuries and deaths even from the most "severe" atmospheric releases. [NUREG-0396, at I-6 to I-7. Footnote omitted].

Commission regulations also reference NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," NUREG-0654/FEMA-FEP-1, (January 1980), as providing a basis for selection of the size and nature of the EPZs. 10 C.F.R. § 50.47, note 1. NUREG-0654, a joint NRC and Federal Emergency Management Agency (FEMA) document,2/ adopted the approach recommended in NUREG-0396 regarding the size and nature of the EPZs and noted that its conclusions were based upon, inter alia, consideration of a range of potential accidents to include worst case core melt accidents involving a containment breach. NUREG-0654, at 7. In short, Commission emergency planning regulations were promulgated after thorough consideration of, inter alia, accidents of all types, including worst case core melt "Class 9" accidents.

NUREG/CR-2239 presents the results of research performed for the Commission on the radiological source term and other technical issues associated with the consideration of potential changes (via rulemaking) to nuclear power plant siting criteria. It reflects essentially a sensitivity study for the

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2/ NUREG-0654 provides nonbinding guidance on means to satisfy the requirements in 10 C.F.R. § 50.47(b). See Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), LBP-81-59, 14 N.R.C. 1211, 1460 (1981), aff'd, ALAB-698, 16 N.R.C. 1290, 1298-99 (1982).

major parameters important to siting decision making.3/ As the authors state:

> This report represents some of the work being done to support the expanding use of probabilistic risk assessment in the regulatory process. The NRC must be careful with the results of such analyses, considering the very large uncertainties in the results. The studies shown in this report must be used in a manner that is consistent with the stated objectives. The results are to provide technical perspective on siting-related issues. Results presented in this report are not significantly different than results of consequence studies that have been available in the open literature for decades. Given the source term assumptions, large consequences are calculated. However, the risks (probabilities times consequences) posed by such accidents are very small. Therefore, the absolute numbers should only be quoted with the associated probabilities and with the stated assumptions recognizing the uncertainties in the analyses.

NUREG/CR-2239, Foreward. Consequently, Mr. Eddleman's selective references to postulated scenarios and isolated results of attempts to test the sensitivity of siting criteria to extremes of input factors, misuse the report, which was not prepared as a basis to reconsider emergency response criteria.4/ As the

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3/ The data of NUREG/CR-2239 compare plants on the same basis, but they truly test only site-related matters (demography in particular) and make no allowance for plant-specific accident probabilities or frequencies. Consolidated Edison Company of New York (Indian Point, Unit No. 2), et al., LBP-83-68, 18 N.R.C. 811, 1032 (1983).

4/ Where it examines the sensitivity to emergency response, all calculations assume the Indian Point population and wind

(Continued Next Page)

Commission has stated, the basis for 10 C.F.R. § 50.47 is independent of specific accident sequences:

> Since a range of accidents with widely differing offsite consequences can be postulated, the regulation does not depend on the assumption that a particular type of accident may or will occur. In fact, no specific accident sequences should be specified because each accident could have different consequences both in nature and degree.

Southern California Edison Company, et al. (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-83-10, 17 N.R.C. 528, 533 (1983).

Finally, Mr. Eddleman fails to point out that the authors of NUREG/CR-2239, the report on which Mr. Eddleman relies, conclude in their summary that "[e]vacuation before containment breach within 2 miles, after release within 10 miles, and sheltering from 10 to 25 miles appears to be a particularly effective response strategy." Id. at 2-104.

Revised Contentions 57C and 57-C-2, and proposed Contention 57-C-16, differ from the four discussed above only in their reference to weather and meteorology. "The exact size and configuration of the EPZs surrounding a particular nuclear

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(Continued)

rose, and New York City meteorology. NUREG/CR-2239 at 2-38. Further, all persons beyond 10 miles were assumed to be exposed to deposited radionuclides for 1 day, regardless of dose rate. Id. at 2-32.

power reactor shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries." 10 C.F.R. § 50.47(c)(2). The considerations involved in the choice of a 10-mile radius plume exposure pathway EPZ are described in the ERP at Part 1, Section II.A.3(p.1) and in the Evacuation Time Estimate. These are consistent with the planning bases discussed in NUREG-0654 at pp. 12-13.

The prevailing wind direction and its influence on emergency planning capability were contested issues on the siting of the Harris plant at the construction permit stage. The presiding Licensing Board found that adequate consideration had been given to wind direction and speed in the area of the site, and that accidental radiological releases will be within NRC requirements. The record also showed that doses in areas such as Raleigh (20 miles) would require no additional protective measures even for the most consequential design basis accident. Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1, 2, 3 and 4), LBP-78-4, 7 N.R.C. 92, 129 (1978).

Contentions 57C and 57-C-2, which seek a 25-mile radius EPZ in certain directions, represent a clear and impermissible attack on the "about 10 miles" regulatory requirement of section 50.47(c)(2). Further, Mr. Eddleman fails to address the realistic (cf. NUREG/CR-2239) phenomenon of plume dispersal in

a situation of high prevailing winds,5/ and the fact that the Harris plant is located in a low-lying area with respect to higher ground in the prevailing wind direction. FSAR § 2.3.2.2.2. Consequently, releases would have a tendency to remain in the plant area.

In addition to the above deficiencies, Contention 57-C-16 employs faulty math. Mr. Eddleman divides the Indian Point population by 26 to represent the Harris population. This erroneously assumes an identical (albeit smaller) population distribution around the Harris and Indian Point sites, whereas, for example, the resident population around the Harris site is zero up to one mile, and 45 up to two miles. See Evacuation Time Estimates, Table 3-1. Further, the contention advances no recommended projective actions not included in the ERP.

ACCIDENT BASES

The general thrust of proposed Contention 97, which is unaltered from its May, 1982 state, is that the plan does not "take sufficient account of, or provide means to deal with"

5/ "The radiological doses at the site boundary and beyond are inversely proportional to the wind speed associated with the relative concentration values utilized to calculate the dose consequences of design basis accidents. Wind speed higher than one meter per second thus would result in lower doses at the site boundary and beyond, primarily due to greater atmospheric dilution. Therefore, a high wind speed considered in conjunction with a design basis accident would result in smaller doses at Raleigh." Shearon Harris, supra, LBP-78-4, 7 N.R.C. at 129 (1978).

rapidly-escalating emergencies. Mr. Eddleman, however, fails to explain how the ERP is deficient, does not address the ERP, and does not propose additional provisions for inclusion in the ERP. Applicants therefore oppose the admission of Contention 97 on the ground that it is so lacking in specificity that it fails to give other parties adequate notice of the issues proposed for litigation.

Proposed Revised Contention 121 asserts that the ERP fails to address appropriate protective actions for accidents greater than the design basis. Mr. Eddleman does not elaborate on the deficiencies he perceives, or the additional protective actions he proposes. More important, however, the Commission's emergency planning regulations already are based upon beyond design basis (i.e., Class 9) accidents. See Applicants' Response to 57-C-15, 57-C-17, 201 and 202, supra. Consequently, the proposed contention is without basis.

Proposed Contention 207 asserts that the plan makes no provision for accidents involving radioactive material in transit to or from the Harris plant. Mr. Eddleman cites no regulation or regulatory guidance in support of his assertion. The obvious purpose of the ERP is to provide for the use of State and local resources in response to an accident at the Shearon Harris Nuclear Power Plant.6/ The ERP is not supposed to

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6/ It is assumed that "the plan" refers to the plans of off-site organizations.

address transportation accidents. See NUREG-0654 at p. 3 n.2 (unique characteristics of transportation accidents involving radioactive material); General Statement of Policy: NRC Response to Accidents Occurring During the Transportation of Radioactive Material, 49 Fed. Reg. 12335 (March 29, 1984) (response to transportation accidents less structured than response for licensed sites; primary responsibility lies with states.). Consequently, Contention 207 is irrelevant and without basis.

PROTECTIVE ACTION DECISION-MAKING

Proposed Revised Contention 2 essentially challenges the emergency classification system in the ERP which, in turn, follows the guidance of NUREG-0654, Evaluation Criteria D and Appendix 1. As a threshold matter, this classification scheme was described in the on-site plan, so this contention is untimely. See SHNPP Emergency Plan, Section 4.

In addition, the contention lacks basis in that it ignores the emergency response capability mobilized at the Site Emergency level, which will facilitate protective action implementation if and when a General Emergency is declared. See ERP Part 1, Section IV.A. (pp. 32-33). The contention also assumes that evaluation, in the face of a release is the only protective action available, when in fact a range of actions exists. See, id., Section IV.E. Finally, the contention confuses the

emergency classification/action level scheme with protective action decision-making. The ERP does not defer the assessment of protective actions for the public as Mr. Eddleman contends. Rather, the decision on protective actions are made, from the outset of the emergency, on the basis of projected or actual off-site of the emergency, on the basis of projected or actual off-site consequences (doses). See, e.g., ERP Part 1, Section IV.E.10 (pp. 41, 50, 52).

Proposed Contentions 233 and 234 should be rejected for the same reasons. The table cited from the county plans is merely a guideline (i.e., it does not preclude earlier consideration of sheltering and evacuation). Other provisions of the ERP, not addressed by Mr. Eddleman, make it clear that protective actions are taken on the basis of projected doses, and not the classification system.

RADIOLOGICAL MONITORING

Revised Contention 2A argues that State and local governments must have independent monitoring capability for the Harris plant, and presumably concludes that capability is deficient because it ". . . is [not] put into action in a site emergency until about 1 hour after notification. . ." and [t]here will be only 2 state teams until about 24 hours into

the accident." Mr. Eddleman then asserts, citing Pisello, et al.,7/ that accurate assessment of the plume requires independent fixed monitors around the site as well as mobile monitors.

Mr. Eddleman's uses of the word "independent" in the proposed contention is confusing, although Applicants assume it first is used to distinguish State and local governments from CP&L (and not from each other), and later is used to distinguish fixed from mobile monitoring.

As a threshold matter, there is no requirement that State and/or local governments have an accident assessment capability. See 10 C.F.R. § 50.47(b)(9) (adequate methods, systems and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency are in use); Southern California Edison Company, et al. (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-82-39, 15 N.R.C. 1163, 1202 (1982), motion to stay denied, ALAB-680, 16 N.R.C. 127, 142 (1982), aff'd, ALAB-717, 17 N.R.C. 346 (1983) (finding that the utility's capability for radiation monitoring and assessment could meet all needs in the plume EPZ and, as a matter of law, can compensate for any deficiencies in the capability of off-site jurisdictions).

7/ The citation to "Pisello, et al.," without more information, is not a sufficient reference to permit other parties to locate it and respond to its use as a basis for the proposed contention. Consequently, the Board should disregard it.

To be sure, NUREG-0654 recommends a radiological monitoring capability for off-site jurisdictions, and the State of North Carolina has such capability.8/ NUREG-0654 Evaluation Criteria I.7-I.11; ERP Part 1, Section IV.C (pp. 36-42). Included in that capability are the assessments of the Radiation Protection Section (RPS) survey teams dispatched for field radiological monitoring. The plan provides that two RPS survey teams will be activated within one hour and dispatched to the vicinity of the plant. Two additional RPS survey teams will be activated within 24 hours of notification.9/ ERP Part 1, Section IV.C.5 (p. 39).

While the capability for "rapid assessment" is recommended, NUREG-0654 Evaluation Criterion I.8, there is no regulatory requirement or guidance on the number of field monitoring teams or the timing of their deployment. See TMI-1, supra, LBP-81-59, 14 N.R.C. at 1505 (1981) (as to timing). Mr. Eddleman offers no basis for the implicit conclusion that the ERP is inadequate as to the State's accident assessment capability.

8/ The counties have limited capabilities and resources for assessing and monitoring accident consequences. They will rely on protective action recommendations from the plant staff prior to State assumption of command and control, and thereafter on recommendations from the State. ERP Parts 2-5, Sections IV.C and IV.E.1.

9/ Mr. Eddleman erroneously converts "within" to "until about." There is no basis for assuming that the State cannot field these teams as soon as they are needed.

Further, Mr. Eddleman ignores CP&L's important role in providing State and local governments with accident assessment information.10/ See ERP Part 1, Fig. 4 (p. 25) and Section IV.C.5.f (p. 40); SHNPP Emergency Plan, Section 4.4. Applicants are required to perform this function.11/ See 10 C.F.R. § 50.47(b)(5); Section IV.D.3, Appendix E to 10 C.F.R. Part 50. To the extent Mr. Eddleman seeks a duplicative capability by off-site organizations, he has advanced no basis for it.

In addition to the fact that no basis is asserted for installing fixed monitors around the site, this proposal was raised and rejected at the construction permit stage. See Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1, 2, 3 and 4), LBP-78-4, 7 N.R.C. 92, 125-127 (1978).

In short, while Revised 2A refers to parts of the ERP, it misreads them, ignores other information, and offers no basis for the independent fixed monitors proposed.

Proposed Contention 57-C-6 questions the impact on the timing of an evacuation decision from the estimated maximum response times for radiological laboratory support in North

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10/ See also Applicants' Motion for Summary Disposition of Joint Intervenors' Contention VI (Monitoring Systems), March 9, 1984.

11/ In its decision on a petition for rulemaking by Critical Mass Energy Project, et al., the Commission rejected the suggestion that a licensee's monitoring functions may be delegated to government agencies. 46 Fed. Reg. 11288, 11290 (1981).

Carolina. The fundamental flaw in the contention is its assumption that laboratory activation is necessary to provide the information essential to a decision to evacuate. This is not the case. An early decision to evacuate would be based on information provided by the plant. ERP Part 1, Section IV.C.5.f (p. 40); Parts 2-5, Section IV.E.1. When activated, the State RPS assessment capability will include use of computers for dose estimation and projection, field monitoring teams and a Mobile Radiation Laboratory. Id., Sections IV.C., IV.E.3, and Attachment 3 (Inventory of Emergency Kits and Radiological Monitoring Equipment). The laboratory support cited by Mr. Eddleman is identified as sampling air filters, water, soil, milk, vegetation and food. While such analyses will serve to confirm dose projections, there is no basis for the presumption that such confirmation is necessary for early protective action decision-making. In short, Contention 57-C-6 misapprehends the ERP and is lacking in basis.

METEOROLOGY

Proposed Contention 57-D-3 questions accident assessment capability (i.e., monitoring of the radioactive plume) "if the wind changes direction." Mr. Eddleman states that the plan does not provide for wind shifts.

Guidance for the capability to acquire and evaluate meteorological information for dose projections is provided in

NUREG-0654 Evaluation Criterion I.5 (and Appendix 2), which applies to licensees. Consequently, the on-site plan contains the information on this capability, and Contention 57-D-3 is untimely as well as lacking in basis. See SHNPP Emergency Plan, Section 3.9.5 (capability to display and record wind speed and direction).

Proposed Contention 57-C-19 argues that "[t]he plan takes no account of rainfall distribution or intensities." Again, Mr. Eddleman has not addressed CP&L's on-site meteorological assessment capability described in the on-site plan, and his contention is untimely as well as lacking in basis. See also, Licensing Board Memorandum and Order (Ruling on Motions for Summary Disposition of Eddleman Contentions 29/30, 64(f), 75, 80 and 83/84), at 16 (Nov. 30, 1983) (finding for unplanned releases and for design basis accident analysis the use of a model not incorporating a rainout factor is still sufficiently conservative).

In addition, Mr. Eddleman quotes from NUREG/CR-2239 out of context. It does not imply that it is important to account for rainfall in modeling accident consequences for nuclear plants. Rather, it states that "because high-consequence events are usually associated with rainfall over population centers, failure to adequately model rainfall can lead to large inaccuracies in peak consequences." NUREG/CR-2239 at 2-9. "Examination of individual calculations shows that population centers between

10 and 20 miles experience early fatalities principally when rain falls on the radioactive plume after it arrives over the population center. Because this is an improbable event, it affects only the CCDF peak and not its 90th, or 99th percentile values." Id. at 2-91 (footnote omitted). In other words, this is one way to get large numbers (for a sensitivity study) at a distance from the plant. Mr. Eddleman has misused the report, and his contention lacks any basis.12/

COMMAND/CONTROL

Proposed Contention 57-C-9 asserts that the time to set up SERT (State Emergency Response Team) and to activate a field command post precludes timely action for taking adequate protective measures in the event of a radiological emergency. In making this argument, Mr. Eddleman assumes that timely action to implement protective measures cannot be taken without SERT. This ignores significant provisions of the ERP.

The plan provides that the time required after notification to assemble SERT and establish a command post in the State Emergency Operations Center is approximately two hours.13/ ERP

12/ In fact, the rainfall removal mechanism greatly lowers plume transport and creates a ground deposition problem for which sheltering is an effective protective action. Mr. Eddleman, in 57-C-19, does not recommend specific protective actions to be considered.

13/ The table cited by Mr. Eddleman (ERP Part 1, p. 72) may be in error since the State EOC will be in Raleigh, where the state employees already are located.

Part 1, Section II.B.(p. 4). It also provides for necessary State actions while SERT is in transition, and provides for local government direction and control until the State assumes direction and control authority. Id. at pp. 4-6; Parts 2-5, Sections II.C., II.D. Contention 57-C-9 lacks basis because it does not address these provisions of the ERP.

Proposed Contention 203 essentially duplicated 57-C-9, except that it references the two-hour period for SERT to establish a command post. Again, Mr. Eddleman assumes that SERT activation is a prerequisite to implementation of protective actions. The State plan provides, however, that initial notification and follow-up messages go from the plant to the counties' warning points, as well as to the State's. ERP Part 1, Section IV.B.2 (p. 34). The county plans provide that during the initial hours of an emergency, prior to State assumption of command and control, plant personnel will recommend protective response actions, and the Chairman of the Board of County Commissioners will take the final responsibility until SERT assumes control for ordering evacuation. ERP Parts 2-5, Section IV.E. The proposed contention does not address these provisions and thus should be rejected.

COMMUNICATIONS

New proposed Contentions 225 and 226 are very similar in that both challenge the asserted reliance of emergency response organizations on commercial telephone lines for initial notification and ongoing communications during an emergency, due to alleged large numbers of calls to be expected. Further, in Contention 226, it is alleged that the backup means of communications have not been analyzed to assess their capability to handle the necessary communications if phone lines are overloaded.

Mr. Eddleman has provided no basis for his implication that emergency response organizations place exclusive reliance on commercial telephones. In fact, SERT headquarters and the four counties' EOCs/warning points are connected with the Harris EOF by dedicated Automatic Ring Down (ARD) telephone circuits. Back-up communications among these points is via commercial telephone, two-way radio systems. These systems will be provided by expanding the existing systems now operated by CP&L, the North Carolina DEM, and the county Emergency Management Departments. System expansion in all cases will incude the addition of temporary base stations, mobile units, and hand-carried portable units. See ERP, Part 1, Section VI.G; Parts 2-5, Section VI.E. Taken together, the communications system incorporates features of redundancy and diversity that assure reliable communications among all response

organizations. Mr. Eddleman's concerns about reliance on commercial phone lines is thus without basis. Similarly, Mr. Eddleman has provided no basis whatsoever on which to posit a challenge to the ability of back-up radio accommodate the necessary communications among State, local and CP&L personnel. Accordingly, proposed Contentions 225 and 226 must be rejected as baseless.

New proposed Contention 244 expresses the same concerns identified in Contentions 225 and 226, though here framed in the context of the Harris site plan. Because the Harris site plan was served on the parties on March 29, 1983, the time for filing contentions on its contents is long past. The proposed contention must therefore be rejected.

NOTIFICATION

Proposed Contention 57-C-3 asserts that the plan does not have provisions for notifying the public during the night of the need to evacuate. Mr. Eddleman does not address the provisions of ERP, Annex C (Public Warning and Notification System and Procedures), which includes the use of fixed sirens, EBS, National Weather Service broadcast system, and emergency service vehicles equipped with sirens and public address systems. See ERP Parts 2-5, Sections IV.B.9-13 (Back-up Alert and Notification System). The sirens and vehicles directly address the concern, and the contention should be rejected as lacking in basis because it does not address the ERP.

Proposed Contention 213 argues that "the boater notification plan "does not include the Harris reservoir and suffers other deficiencies. The ERP citation in the contention is in error. ERP Annex G is "Warning and Notification of Boaters on Jordan Lake and the Surrounding Recreation Areas." The Harris reservoir, however, is addressed at SHNPP Emergency Plan Section 4.5.3, which provides that, in addition to the fixed sirens, aircraft and patrol boats will be used to alert people in the Harris reservoir where a-propriate and necessary. Mr. Eddleman does not address this information, so the contention lacks basis.14/ In addition, a contention with respect to the on-site plan is untimely.

Proposed Contention 232 advances the proposition that notification of schools requires unidentified special communications to and between schools. The regulation cited and the referenced guidance in NUREG-0654 do not endorse this concept. Mr. Eddleman does not explain why the provisions for notification, described above in response to 57-C-3, are inadequate for notification of schools. Consequent. , the contention lacks basis and should be rejected.

In new proposed Contention 231, Mr. Eddleman asserts that the ERP fails to "adequately address the need for notification

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14/ Further, the information in the Evacuation Time Estimates, Chapter 4, indicates that a maximum of 325 would use the reservoir area at any time in the summer.

of schools in the [EPZ] or the required communications systems to coordinate their evacuation." However, Mr. Eddleman cites no basis for these alleged requirements (other than the general reference to the planning standard requiring a range of protective actions), and Applicants know of no such requirements. Indeed, the fixed siren system is designed to warn immediately all areas within the 10-mile EPZ (including the schools). See e.g., ERP Part 2, Section IV.B.9. Thus, there is no basis for the asserted "need" for a separate communications system for the notification of schools in the EPZ. Nor has Mr. Eddleman specified the need for a special communications system to coordinate the evacuation of schools. Accordingly, this part of the contention must be rejected as baseless.

Similarly, there is no regulatory basis whatsoever for the proposed required installation of two-way radios in school buses. Indeed, even the scenarios postulated by Mr. Eddleman do not compel the installlation of such radios. Certainly there is no need to notify buses of route changes due to plume shifts, since sheltering would be the protective action of choice unless evacuation could be "completed prior to significant release and arrival of radioactive material in the affected area." See, e.g., ERP Part 1, Section IV.A.4.

Nor is there a need for two-way radios to enable buses to make multiple trips. Mr. Eddleman has completely failed to suggest what information drivers might need about such trips

that they could not be provided with either in advance of an emergency, or at one end or the other of each trip they make (at the time of the emergency).

Similarly, there is no need for two-way radios to notify bus drivers of an evacuation order issued during pick up or drop off times. As discussed above, the fixed siren system will warn all areas within the 10-mile EPZ. See, e.g., ERP Part 2, Section IV.B.9. Thus, when bus drivers enroute hear the sirens sound, they -- like the rest of the public -- will know to tune to an area EBS station to determine the nature of the threat (tornado, nuclear accidents, etc.) and the appropriate protective actions.

Accordingly, because it too is lacking in basis, the second part of proposed Contention 231 also must be rejected.

SHELTERING

Revised proposed Contentions 57-C-10 and 57-C-13 and new proposed Contention 214 all generally assert that the ERP fails to adequately reflect the basis for the choice of sheltering as a protective action. The applicable regulatory standard is NUREG-0654 Criterion J.10.m, which Mr. Eddleman cites in Contention 214. However, that criterion specifically identifies three reports that "may be considered in determining protection afforded" in local residential units and other shelters -- one of which is "Protective Action Evaluation Part II, Evacuation

and Sheltering as Protective Actions Against Nuclear Accidents Involving Gaseous Releases" (EPA 520/1-78-001B). And the ERP places express reliance on that report, EPA 520/1-78-001B, as a basis for the "evaluation of comparative dose reduction factors expected through either sheltering or evacuation or a combination of the two." ERP, Part 1, § IV.E.10.b. Thus, contrary to Mr. Eddleman's allegations, the ERP plainly meets the regulatory guidance of NUREG-0654. Proposed Contentions 57-C-10, 57-C-13, and 214 must therefore be rejected.

RESPIRATORY PROTECTION

Revised proposed Contention 57-C-12 castigates State and local emergency preparedness officials, asserting that only one of the county plans reflects respiratory protection (i.e., covering one's nose and mouth with a cloth) as a protective action option. Mr. Eddleman is quite simply mistaken. All four county plans include respiratory protection as a protective action to be considered. ERP Parts 2-5, § IV.E.5.f; see also ERP Annex D (EBS messages with instructions on respiratory protection). The proposed contention therefore lacks basis, and must be rejected.

POTASSIUM IODIDE

Revised proposed Eddleman Contentions 30 and 30A, and new proposed Contentions 236(c), 238 and 239 generally challenge the ability of the State of North Carolina to distribute

potassium iodide (KI) to specified populations in the plume EPZ. Applicants oppose the admission of these contentions.

In accordance with NUREG-0654, Evaluation Criterion J.10.e, the ERP specifically provides for the use of KI for emergency workers and institutionalized persons within the plume EPZ whose immediate evacuation may be infeasible or very difficult. Specifically, the ERP provides for the coordination of procurement of KI prior to a radiological emergency by the Division of Health Services (DHS), Department of Human Resources, in order to ensure that "a sufficient number of potassium iodide units are conveniently and strategically located in the vicinity of the Shearon Harris Plant." ERP Part 1, § IV.E.6. KI will be stored in each of the four EPZ county health departments under the control of county health officials. Id. The State Emergency Response Team (SERT) will be informed by DHS of any significant changes in the availability of KI. Id. The DHS is identified as the organization that will determine the number of KI units required for emergency workers and institutionalized persons within the plume EPZ. Id.

Thus, Mr. Eddleman's complaint that the ERP doesn't specify the radioprotective drug to be used (Contention 30A) is simply erroneous; the ERP identifies the drug by its generic name, "potassium iodide." Similarly, contrary to Mr. Eddleman's assertions (Contention 30), the ERP does specify where the drug will be stored -- in the four county health

departments. Moreover, although Mr. Eddleman states otherwise (Contention 30A), the plan does identify the persons who may receive KI -- emergency workers and institutionalized persons. Certainly Mr. Eddleman has failed to offer any reason why such persons need be further identified in the plan (e.g., by name).

Further, contrary to Mr. Eddleman's expressed concern in proposed Contention 239 that no one is designated "to make sure each individual at risk receives [KI]," DHS is expressly charged with responsibility for determining the number of KI units required for emergency workers and institutionalized persons. The ERP thus also provides for the determination of the quantities of KI needed (Contentions 30 and 30A). Mr. Eddleman has failed to specify even a single deficiency in any of these provisions.

The ERP also delineates the decision chain for distribution and administration of KI. ERP Part 1, § IV.E.7, and Parts 2-5 at § IV.E.7. Mr. Eddleman suggests that the decision-making process may be too lengthy, alleging simply that it "permits up to 30 minutes delay . . . in the decision" (Contention 30). This part of the contention amounts to nothing more than a bare statement of fact. Mr. Eddleman has failed to indicate why he believes the possibility of 30 minutes' consideration of such a public health policy matter to be unacceptable. Nor has he specified how he would short-cut the public health policy decision-making process, particularly

in light of his acknowledgement (in Contention 239) of the risks attendant to the administration of KI. In any event, Mr. Eddleman has failed to recognize the bifurcated process for making the decision to administer KI. When total thyroid exposure "is suspected, projected, or confirmed to reach or exceed 15 rems" (emphasis in the original), the State Health Director or his agent "is empowered to authorize" the distribution of KI, through the decision chain which Mr. Eddleman criticizes. But, when the exposure "is suspected, projected, or confirmed to reach 25 rems" (emphasis in the original), the State Health Director or his agent "will recommend" (emphasis supplied) the administration of KI. Thus, the ERP does provide for expedited decision-making on the administration of KI when it is warranted by the circumstances. Accordingly, Mr. Eddleman's concerns here lack both specificity and basis.

Finally, Mr. Eddleman asserts that the ERP fails both to assign anyone the responsibility for distributing KI (Contention 239) and to identify the means by which KI would be distributed (Contentions 30, 30A and 238). To the contrary, the ERP both charges the respective County Health Department Directors with responsibility to distribute KI and describes the method of distribution The respective County Health Departments will be responsible for delivering KI to hospitals and nursing homes, and emergency workers will be provided with KI at pre-identified "staging areas" (specified in the county

plans). ERP Parts 2-5 at Sections IV.E.6.1 and IV.E.7.e. Mr. Eddleman speculates, in Contention 238, that "[t]ravel to supply these drugs will surely be difficult during an evacuation, and has not been planned for specifically . . ." Contrary to this assumption, the State and the four counties have expressly planned to keep one lane of evacuation routes free for emergency vehicles and other such priority uses. Evacuation Time Estimate, § 2.2 (concurred in by State and local officials). Given this information, Mr. Eddleman's assertion that the ERP fails to provide timely access to KI for hospitals and nursing homes (Contention 236(c)) is patently insufficiently specific, and lacks basis.

Mr. Eddleman also complains that the ERP makes no provision for obtaining the "informed consent" of persons to whom KI is to be administered (Contention 239). However, Mr. Eddleman has provided no factual basis to support the implication that -- absent such a provision -- the administration of KI in an emergency would be significantly (and detrimentally) delayed to fulfill asserted obligations of "medical ethics." Nor is there a regulatory requirement that the ERP include such a detailed provision. Therefore, these additional allegations must also be rejected as lacking the required specificity and basis.

In sum, the ERP identifies the group of individuals who might receive KI. In addition, those responsible for the procurement, storage, distribution and administration of KI have

been identified in the ERP. The predistribution/stockpiling of KI in a number of strategic locations within the EPZ, under the control of the four county health officials, ensures that emergency workers and institutionalized persons will be provided with KI if the decision is made to administer it. Moreover, the county plans describe the plans for distribution of KI, specifically identifying the staging areas where emergency workers would receive KI, and providing for the transportation of KI to hospitals and nursing homes. Because proposed Contentions 30, 30A, 236(c), 238 and 239 fail to address or call into question these pertinent provisions of the ERP, and/or because Mr. Eddleman has failed to provide the requisite basis for his allegations, Contentions 30, 30A, 236(c), 238 and 239 must be rejected.

In contrast to the proposed contentions discussed above (which challenge provisions for KI for emergency workers and institutionalized persons), deferred Contention 29(d) and revised Contention 57-C-11 have as their general thrust the provision of KI to the general public within the plume EPZ. Proposed Contention 29(d) asserts generally that the ERP fails to provide "means, such as potassium iodide pills or capsules, readily available to citizens around SHNPP." The proposed contention is completely lacking in the specificity and basis required by the Commission's regulations. To the extent this proposed contention was intended as a challenge to "means"

other than KI, Mr. Eddleman was required to identify those "means" for the Board and the parties. Further, Mr. Eddleman disagrees with the State of North Carolina's public health policy decision not to distribute KI to the general public -- a policy already established for existing operating reactors. He is required to specify why he disagrees with the policy, and to provide the reasons or authority on which his position is based. This he has failed to do.

In proposed Contention 57-C-11, Mr. Eddleman alleges that NUREG-0654 provides for the administration of KI to the general public when sheltered, asserting that in such circumstances, the public is a population "whose immediate evacuation may be infeasible or very difficult." However, that portion of NUREG-0654 Criterion J.10.e., read in context, provides only for KI "for emergency workers and institutionalized persons . . . whose immediate evacuation may be infeasible or very difficult." Thus, there is no regulatory basis for the requirement Mr. Eddleman would impose. The law on this point is clear. The policy question whether -- and, if so, to whom -- to distribute KI is a decision that rests squarely with the state. See Union Electric Co. (Callaway Plant, Unit 1), ALAB-754, 18 N.R.C. ___, slip op. at 3-4 (Dec. 9, 1983). Accordingly, proposed Contentions 29(d) and 57-C-11 must be rejected.

EVACUATION TIME ESTIMATES

Mr. Eddleman has proposed three revised contentions (Contentions 57-D-1, 57-D-2, and 57-C-20) and ten new contentions (Contentions 215, 216, 217, 218, 219, 220, 221, 222, 223 and 224) which are all -- on their face -- based on the Evacuation Time Estimate, which was served on the Board and all parties on December 29, 1983. Under the Board's standing rule requiring the filing of new contentions no later than thirty days after receipt of the document on which they are based, these contentions were required to be filed no later than the end of January, 1984. See LBP-82-119A, 16 N.R.C. 2069, 2073 (1982). Thus, these contentions are late-filed -- and by a matter of months, not days. And Mr. Eddleman has made no attempt to show "good cause" for the late filing of contentions with respect to the Evacuation Time Estimate in particular. Accordingly, all of the above-listed proposed contentions must be rejected as untimely.

Although proposed revised Contentions 57-D-1 and 57-D-2 reference evacuation time estimate figures in the ERP, the figures in the ERP are taken from the Evacuation Time Estimate. Accordingly, while these proposed contentions do not expressly reference the Evacuation Time Estimate, it is beyond dispute that both are based on that document and are, therefore, late-filed. Proposed Contentions 57-D-1 and 57-D-2 also share other fatal defects. Both have as their thrust the implication

that evacuation cannot be accomplished quickly enough. In this respect, the proposed contentions constitute an impermissible challenge to the regulations. The Commission's emergency planning regulations simply do not require that evacuation be completed within any particular time frame. Rather, the regulations require only that a license applicant provide "an analysis of the time required to evacuate. . ." See The Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-730, 17 N.R.C. 1057, 1069 n.13 (1983). Accordingly, proposed Contentions 57-D-1 and 57-D-2 must also be rejected on this independent ground. Finally, the proposed contentions offer not a clue as to the changes in planning Mr. Eddleman would make assuming the observations in the proposed contentions were valid, in effect, the proposed contentions lack a "prayer for relief," and are therefore rendered wholly non-litigable. Thus, the proposed contentions lack the bases and specificity required by the Commission's Rules of Practice. For all these reasons, proposed Contentions 57-D-1 and 57-D-2 must be rejected.

Proposed revised Contention 57-C-20 asserts that most roads to be used in an evacuation are two-lane roads, and alleges that "[u]nder conditions of panic accidents can and will happen on these roads." However, Mr. Eddleman has advanced no authority whatsoever in support of the implication that the public would "panic" in an evacuation. Indeed, embracing the

"conventional wisdom" over testimony by intervenors' witnesses that experience in other types of disasters is ireelevant to human behavior in a nuclear emergency, a licensing board recently observed:

> [S]tudies of human response to emergencies show that panic does not occur during mass evacuations ***.

Consolidated Edison Co. of New York (Indian Point, Unit No. 2), LBP-83-68, 18 N.R.C. 811, 957 (1983). Mr. Eddleman has failed to provide any basis to question the "conventional wisdom." Accordingly, the premise of his contention must be rejected.

Mr. Eddleman also suggests that -- with or without panic -- an evacuation will involve a significant number of car accidents. Again, Mr. Eddleman offers no authority to support his assertions. In actuality, past experience with large-scale evacuations has demonstrated that the incidence of automobile accidents is reduced, because traffic moves more slowly. See Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), LBP-82-100, 16 N.R.C. 1550, 1561-62, 1576 (1982). Because Mr. Eddleman advances no basis whatsoever to support hi's arguments (and certainly nothing to challenge past experience), his allegations must be rejected.

Further, to the extent that proposed Contention 57-C-20 implies that an auto accident might block an evacuation route, Mr. Eddleman has simply failed to recognize that -- in an evacuation -- roads will be operated with normal two-way traffic

patterns, so that one lane will be essentially open at all times. See Evacuation Time Estimate, Section 2.2. This will not only allow emergency vehicles easy access to disabled cars, but it also will permit evacuating vehicles to temporarily use the open lane in the event of a traffic accident, so as to preclude total blockage of an evacuation route. See Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), LBP-81-59, 14 N.R.C. 1211, 1624 (1981). And the ERP provides for resources for the removal of traffic impediments in an emergency. See ERP Part 1, Sections III.J.1.f, IV.E.8; Parts 2-5, Section IV.E.10.

Finally, Mr. Eddleman asserts that the capacities of evacuation routes have not been assessed. To the contrary, the Evacuation Time Estimate describes the capacity calculations underlying that document, and provides the highway capacity data for each individual link in the evacuation route network. Evacuation Time Estimate, Sections 6.10, 9. Thus, these allegations have absolutely no basis in fact, and proposed Contention 57-C-20 must be rejected in its entirety.

New proposed Contention 215 notes that the Evacuation Time Estimate characterizes two identified vehicle occupancy and population assumptions as "conservative," and asserts that these assumptions "may force evacuation time estimates upwards." However, the proposed contention selectively excerpts the text of the Evacuation Time Estimate. Mr. Eddleman

neglects to point out that the vehicle occupancy rates for Harris Reservoir and Jordan Lake, which the preparers of the Evacuation Time Estimate considered conservative, were actually supplied by the U.S. Army Corps of Engineers, the State Division of Wildlife Management, and local emergency preparedness officials. Evacuation Time Estimate, Section 3.2. Nor does he volunteer that the preparers of the Evacuation Time Estimate concluded that double-counting school children would have little effect on the number of vehicles used to evacuate the permanent population (and thus on the evacuation times) since each household uses one vehicle, regardless of the number of people at home at the time of evacuation. Evacuation Time Estimate, Section 3.4. Finally, he has also ignored the expert judgment of the preparers of the Evacuation Time Estimate, who evaluated the impact of the identified conservatisms and concluded that "[f]or the purpose of developing evacuation clear-time estimates, however, these figures are considered appropriate since they reflect the best available data." Evacuation Time Estimate, Section 3.4.

Nor has Mr. Eddleman provided <u>any</u> rationale or other affirmative basis to contradict the Evacuation Time Estimate's assessment of the impact of the two identified conservatisms, or to support his implication that the conservatisms would have a significant impact on evacuation times.15/ Thus, the alleged

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15/ Mr. Eddleman's reliance upon "the opinion of expert Paul Holmbeck" (his words) is an insufficient basis for this pro-

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basis for proposed Contention 215 (taken, as it is, wholly out of context) fails to provide the requisite support for the contention. Accordingly, the contention must be rejected.

The new proposed Contention 216 alleges that the Evacuation Time Estimate "fails to divide population data into subgroups (e.g. those using autos and those not using autos . . .)." Mr. Eddleman further contends that "[t]he exact method and type and availability of transport for those without autos are not specified, except for schoolchildren." Mr. Eddleman is simply wrong on both counts. The Evacuation Time Estimate divides the "permanent resident" population of the EPZ into the "Auto-Owning Permanent Population" and the "Non-Auto-Owning Permanent Population." Compare Evacuation Time Estimate, Section 3.1.1 with Section 3.1.2. Moreover, the Evacuation Time Estimate correctly notes that, of the persons who do not own cars, "many are expected to ride with neighbors and relatives. Some individuals may rely on transportation provided by local emergency management officials." Evacuation Time Estimate, Section 6.2.1. The Evacuation Time Estimate

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(Continued)

posed contention, particularly where -- as here -- the quoted opinion reflects no particularized knowledge of the Harris area. Mr. Holmbeck is simply a "well-informed layman". Commonwealth Edison Co. (Byron Nuclear Power Station, Units 1 and 2), Initial Decision, 19 N.R.C. ___, slip op. at 368 (January 13, 1984).

further notes that "[s]heriffs' departments, fire departments, and school buses will be used to transport individuals with no private means of transportation who have not shared a ride with family or friends." Evacuation Time Estimate, Section 8.2. Thus, Mr. Eddleman's allegations are baseless. Moreover, because he has failed to cite to even a single relevant portion of the Evacuation Time Estimate, the proposed contention lacks specificity. Accordingly, in addition to being late-filed, the proposed contention must also be rejected for lack of basis and specificity.

New proposed Contention 217 charges that the Evacuation Time Estimate "fails to systematically consider the relative significance of alternative assumptions, e.g., weather conditions, day versus night, peak transient versus off-peak transient populations." Again, however, Mr. Eddleman is simply mistaken. The Evacuation Time Estimate fully assesses a wide range of modeled conditions, including alternative assumptions as to weather conditions (good weather/adverse weather), time of day (daytime/night time), and peak transient versus off-peak transient population (ranging from peak transient population to no transients). See, e.g., Evacuation Time Estimate, Section 1.3, Table 1-1, Table 1-2. Accordingly, the contention lacks basis. Moreover, because Mr. Eddleman has failed to address any of the relevant sections of the Evacuation Time Estimate, the contention lacks the requisite specificity. For these

reasons, and because it is late-filed, proposed Contention 217 must be rejected.

In new proposed Contention 218, Mr. Eddleman alleges that evacuation times are not provided for each special facility, nor are industrial shutdown times considered. There is no regulatory basis for the requirement proposed by Mr. Eddleman, i.e., that a separate estimate be prepared for each special facility. Rather, NUREG-0654 provides only that each special facility should be "treated on an individual basis." NUREG-0654, at 4-10. The Evacuation Time Estimate does just that, identifying special facilities (hospitals, nursing homes, schools, industrial facilities, etc.) as individual units, and locating them into appropriate evacuation planning zones. See, e.g., Evacuation Time Estimate, Section 3.3; Table 3-5, Figure 3-3 (hospital and family care homes); Table 3-6, Figure 3-4 (schools); Section 4.0, Table 4-2, Figure 3-2 (industrial facilities). Then, the evacuation time estimates in Section 7 of the Evacuation Time Estimate report reflect each of these special populations separately. Mr. Eddleman fails to address the specific sections of the Evacuation Time Estimate which are relevant, and accordingly neglects to indicate why he believes the Evacuation Time Estimate's treatment of special facilities does not constitute treatment "on an individual basis" under NUREG-0654. Similarly, contrary to Mr. Eddleman's assertions, the preparers of the ETE did consider shutdown times for

industrial facilities. Ninety percent of work force departures would occur during the 30-minute period following alerting and initial preparation, with the remaining portion of the work force departing in the next 30 minutes. SHNPP Unit 1 will maintain emergency operations forces and will employ protective measures for those who do not evacuate. Evacuation Time Estimate, Section 6.2.2. Thus, the proposed contention must be rejected as lacking both basis and specificity, as well as late-filed.

The thrust of new proposed Contention 219 is that, because -- it is alleged -- "some parents will go to schools to evacuate their children," other assumptions of the Evacuation Time Estimate wil be invalidated. The assumptions which would assertedly be rendered invalid are (1) that the auto-owning population will evacuate from their homes; (2) that the public will evacuate via designated evacuation routes; and (3) that all school children will be evacuated by bus. The proposed contention must be rejected in its entirety.

Mr. Eddleman has provided no authority whatsoever to support his assertion. Indeed, as another licensing board has recognized:

> [T]he public will comply with a plan and with instructions; but it is the lack of a plan or clear instructions that may present a problem. *** Therefore, to ensure the validity of an assumption that most parents will not rush to the schools to pick up their children, the plans *** must contain clear instructions for the evacuation of school

children, and the public must be properly educated.

Consolidated Edison Co. of New York (Indian Point, Unit No. 2), LBP-83-68, 18 N.R.C. 811, 959-60 (1983). Here, Mr. Eddleman has failed to even acknowledge that, in an emergency, EBS announcements would advise parents of the shelter to which each school's students have been taken. ERP Part 1, Section IV.E.4. Thus, Mr. Eddleman has failed to provide any basis whatsoever for his implicit assertion that the parents in the area around the Harris plant would ignore the EBS announcements and insist on driving to the evacuated schools. Nor has he even referred to the extensive provisions for traffic control, which are used to ensure that the public does not deviate from predesignated evacuation routes. See e.g., Evacuation Time Estimate, Sections 2.2, 8.2; ERP Parts 2-5, Figure 2, Section IV.E.9. Thus, he certainly has provided no basis to indicate that traffic control measures will be unsuccessful in securing public adherence to designate evacuation routes. And, finally, even assuming some parent did go to the schools to pick up their children, Mr. Eddleman has provided no basis to support the assumption (implicit in the contention) that the effect of the parents' actions on evacuation times as a whole would be sufficiently significant to affect the protective action decision-making process.

Accordingly, because proposed Contention 219 lacks specificity and basis, and because it is untimely, Applicants oppose its admission.

New proposed Contention 220 alleges, in part, that the Evacuation Time Estimate errs in assuming that auto owners will evacuate from their homes rather than from their workplace, because traffic jams will occur at the workplaces. However, Mr. Eddleman advances no basis whatsoever for his assertion that traffic jams will occur at workplaces, and -- indeed -- does not even acknowledge the detailed provisions for traffic control, to prevent any such queuing. See, e.g., Evacuation Time Estimate, Sections 2.2, 8.2; ERP Parts 2-5, Figure 2, Section IV.E.9. Moreover, because he has failed to address the relevant documentation, the contention lacks the requisite specificity.

The second part of the proposed contention is also objectionable, and evidences a fundamental misunderstanding of the referenced section of the Evacuation Time Estimate. While Mr. Eddleman interprets the cited section as an indication of the level of actual planning for the evacuation of the Boy Scout camp, that section of the Evacuation Time Estimate actually pertains to estimation of vehicle demand. Thus, the cited section does not assume that sufficient vehicles are available to evacuate the camp, so that Mr. Eddleman has provided no basis for this portion of the contention. The proposed contention

should therefore be rejected in its entirety, as untimely, without basis, and lacking in specificity.

The gist of new proposed Contention 221 is yet another untimely challenge to the Evacuation Time Estimate on the ground that the computer model used to generate the estimates assumes familiarity with the area in exercising driver preference, when -- it is asserted -- transients would not have the assumed familiarity. However, the "familiarity" which Mr. Eddleman suggests is assumed is nothing more than a determination as to "the direction of the outbound links (away from the nuclear plant or hazard area) and the traffic conditions on the outbound links." Evacuation Time Estimate, Section 6.3.2. Indeed, the Evacuation Time Estimates effectively disavow a general familiarity with the area -- "driver behavior during an evacuation is assumed to be myopic in that only information regarding the immediate outbound links at each intersections is assumed to influence route selection decisions." Evacuation Time Estime, Section 6.3.2. In addition, Mr. Eddleman has not considered the detailed provisions for traffic control, to ensure that the public adheres to predesignated evacuation routes. See, e.g., Figure 2, Section IV.E.9. And the evacuation routes will be marked with signs. ERP Parts 2-5, Section IV.E.11. Finally, it strains credulity to assert that transients would be oblivious to the stream of traffic of the resident population on its way out of the EPZ. Moreover, contrary

to the further assertions of the contention, the Evacuation Time Estimate does consider "human behavior under stress. See, e.g., Section 6.2.1 (actual evacuee preparation and departure times may vary according to perceived severity of event); Section 6.3.3 (where residual link capacity is zero, model allows some small capacity for lower-priority approach "sneak-in" effects). For all these reasons, proposed Contention 221 must be rejected.

New proposed Contention 222 is also a late-filed attack on the Evacuation Time Estimate. In this contention, Mr. Eddleman charges that the Evacuation Time Estimate fails to describe the "highly individualized means of transportation" for evacuation of the special facilities. To the contrary, the means and availability of transportation for special facilities is detailed in the Evacuation Time Estimate. See Sections 3.3, 8.2. NUREG-0654 calls for nothing more. Thus, this part of the proposed contention must be rejected as both out-of-time, and baseless.

Mr. Eddleman also questions the capability for single trip evacuation of the schools. However, Mr. Eddleman has offered not a shred of basis to support his challenge to the capability for school evacuation. Ignoring the wealth of data available in the Evacuation Time Estimate (as well as the ERP), Mr. Eddleman has not even suggested an estimate of the number of school students he asserts would need bus transportation in an

emergency, the number of school buses that would be needed to evacuate those students in an emergency, or the number of school buses available to evacuate the students. See, e.g., Evacuation Time Estimate, Section 6.2.5 (discussing availability of school buses); Section 5.1 (describing evacuation routes); Figure 3-4 (showing location of schools); Table 4-4 (listing all schools in EPZ, with numbers of students and staff per school). Indeed, Mr. Eddleman has not even referenced the Evacuation Time Estimate's determination that approximately 100 school buses will be needed to evacuate the schools in the EPZ; certainly he has provided no basis to question that determination. See Evacuation Time Estimate, Section 8.2. Finally, Mr. Eddleman has failed to acknowledge the availability of supplemental/back-up buses and drivers. See, e.g., ERP Part 1, Section IV.E.4.d and f. Given the documentation available to Mr. Eddleman to frame his contentions, his unsupported charges here should be rejected as pure speculation. Applicants accordingly oppose the admission of proposed Contention 222 in its entirety, on the ground that it is late, lacking in specificity, and baseless.

New proposed Contenion 223 is, again, an attack on the Evacuation Time Estimate. Here, Mr. Eddleman argues that the Evacuation Time Estimate failed to consider "highly individualized mobilization times" and "time of day considerations" in special facility estimates (particularly nursing home

evaucation times, and the impact of visiting hours thereon). To the contrary, the preparation and mobilization times for the hospitals, nursing homes, family care centers and schools were developed "based upon discussions with representatives of the health care facilities, state and local emergency preparedness officials, and personnel in the Wake County school system." Evacuation Time Estimate, Section 6.2.5. Thus, Mr. Eddleman's charge that the Evacuation Time Estimate did not consider individualized mobilization times, including time of day considerations, is without basis. Proposed Contention 223 should therefore be rejected.

In new proposed Contention 224, Mr. Eddleman claims that the Evacuation Time Estimate is "defective" because it allegedly does not assume area-specific weather conditions, does not identify the adverse weather frequency used, and "does not give consideration to the impact of peak population including behavioral aspects." However, Mr. Eddleman has not referenced a single section of the relevant documentation; the proposed contention thus lacks specificity. Nor has Mr. Eddleman provided any basis whatsoever to support his allegations. The substance of the proposed contention is nothing more than Mr. Eddleman's parroting of excerpts of NUREG-0654 -- plainly insufficient to meet the Commission's requirements for a litigable contention. Accordingly, proposed Contention 224 must be rejected as late, baseless, and lacking in specificity.

New proposed Contention 205 asserts that the ERP "is inadequate for evacuation under snow conditions" for several reasons. However, Mr. Eddleman provides no basis whatsoever for any of the charges in his proposed contention. Mr. Eddleman first alleges, with no supporting authority, that "[m]ost Carolinians cannot drive well in snow; panic would contribute to accidents especially for evacuation at night in a snow storm." But there is also no basis for the assertion that panic would occur in the evacuation. Indeed, "studies of human response to emergencies show that panic does not occur during mass evacuations . . .." Consolidated Edison Co. of New York (Indian Point, Unit No. 2), LBP-83-68, 18 N.R.C. 811, 957 (1983). In fact, past experience with large-scale evacuations has demonstrated tha the incidence of automobile accidents is actually reduced in evacuations, because traffic moves more slowly. See Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), LBP-82-100, 16 N.R.C. 1550, 1561-62, 1576 (1982).

Further, to the extent that Mr. Eddleman is concerned that any traffic accidents that do occur "would lead to bottlenecks and prevent successful evacuation," Mr. Eddleman has failed to acknowledge that, in an evacuation, roads will be operated with normal two-way traffic patterns, so that one lane will be open at allt imes. See Evacuation Time Estimate, Section 2.2. This will not only allow emergency vehicles easy access to disabled

cars, it will also permit evacuating cars to temporarily use the open lane to pass traffic accidents, to preclude total blockage of an evacuation route. See Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), LBP-81-59, 14 N.R.C. 1211, 1624 (1981). Mr. Eddleman's concerns about snow are thus baseless, although -- if weather were sufficiently adverse, sheltering would be selected as a protective action rather than evacuation.

Finally, Mr. Eddleman states that, "under snow conditions," there would be insufficent resources to evacuate hospital and nursing home patients and prisoners and person without transportation. But, again, he provided no authority to support his sweeping allegations. Nor does he reference any of the numerous sections of the ERP and the Evacuation Time Estimate which address the evaucation of these populations. Thus, this portion of the proposed contention also lacks the specificity required of a litigable contention. Proposed Contention 205 should therefore be rejected in its entirety.

IMPEDIMENTS TO EVACUATION

Mr. Eddleman has proposed five redundant contentions which address the ERP's treatment of impediments to evacuation. Applicants oppose all five of these contentions.

Proposed Contention 57-C-4 challenges the adequacy of the ERP's provisions for dealing with ice, snow and fog which might

impede traffic flow.16/ Proposed Contention 57-C-5 challenges the adequacy of the ERP's provisions for clearing debris and vehicle wrecks from the roads. In this contention, Mr. Eddleman also complains about the insufficient level of detail in the ERP on plans for dealing with impediments. Mr. Eddleman would have the ERP include an inventory of equipment and personnel for impediment removal, time estimates to remove impediments, and an assessment of "whether the equipment could reach places to clear wrecks or debris in the event of either a panicky or an orderly evacuation." Revised Contention 117 repeats the concern stated in proposed Contention 57-C-5 about numbers and availability of wrecker trucks and equipment to keep evacuation routes clear. Here, Mr. Eddleman also expresses a concern about ordinary accidents and accidents of hypothetical hazardous cargo: "What if, for example, a car or truck tries to beat a train to a crossing during evacuation, derailing the train and releasing hazardous material from the train or the truck (or even the car)?" Finally, in Revised Contention 117-A, Mr. Eddleman is concerned about the possibility that trains might block evacuation routes, and faults the ERP for

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16/ Mr. Eddleman expresses concern, in proposed Contention 57-C-4, about the possibility of rainout or entrainment of the plume making sheltering less effective and evacuation preferable. Without addressing the merits of this concern, Applicants recognize the need to provide for a range of protective actions, including evacuation of the plume exposure EPZ. 10 C.F.R. § 50.47(b)(10); NUREG-0654, Evaluation Criterion J.

failing to analyze this possibility. Proposed Contention 118 complains that the ERP does not plan for hazardous materials and cargoes that may be abandoned and block evacuation routes.

Applicants and state and local governments are required to plan for radiological emergencies occurring at the Harris Plant. This means that the NRC must have "reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency." 10 C.F.R. § 50.47(a)(1). One of these protective measures is evacuation. NUREG-0654, Evaluation Criterion J. However, this does not mean that the State must be able to guarantee that evacuation will be possible under every conceivable scenario.

> It would be possible to postulate combinations of conditions that would make evacuation impossible for extended periods of time although the likelihood of such events may be remote.

Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), LBP-81-59, 14 N.R.C. 1211, 1581 (1981), aff'd, ALAB-698, 16 N.R.C. 1290 (1982). As the Licensing Board in the TMI-1 case explained in assessing the TMI-1 time evacuation study -- an important tool used by the State in considering whether to recommend evacuation -- "[T]he objective is to postulate and analyze an adverse weather scenario that has some reasonable possibility of occurrence." Id. at 1581; see also Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-82-70, 16 N.R.C. 765, 785-86 (1982)

(time estimates realistically cope with a range of likely conditions that might occur during an emergency).

Thus, the State cannot and need not ensure that evacuation always will be feasible, i.e., that it always will be able to deal with impediments, whether far-fetched, such as some of Mr. Eddleman's examples, or very severe, such as weather conditions which would impede an evacuation. Cf. ERP, Part 1, Figure 11 (recommended protective actions). Rather, NUREG-0654 recommends that plans identify impediments to evacuation routes and the anticipated means for dealing with them. NUREG-0654, Evaluation Criterion J.10.k.

While the ERP clearly should consider how the State and local governments will deal with impediments to evacuation, it need not specify every detail as to how this effort will be accomplished. The purpose of the ERP is to delineate the concept of operations in the event of a radiological emergency. See NUREG-0654, Section II.A.1.b. Cf. Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 N.R.C. 1076, 1107 (1983) (emergency plans should satisfy the 16 broadly drafted standards of 10 C.F.R. § 50.47(b)). The concept of operations establishes the emergency organizational structure, the mechanism for direction and control of emergency response efforts, and the emergency functions that are required. The ERP need not, and should not, contain a large volume of detail concerning how each specific emergency task will

be undertaken by emergency workers. Such details would cause the plan to become unreasonably burdensome and detailed, and consequently, make it unusable. See NUREG-0654, at 29 (plans should be hundreds of pages, not thousands). Furthermore, if a task is to be performed by support emergency personnel who are being asked to do work that they do in the ordinary course of their job, there is no need for a description of how that work will be performed. For example, in the case of impediment removal, the individuals assigned this task already know how to use a tow truck and how to plow snow. The ERP need not include a special provision on the functions. Cf. NUREG-0654, at 29 (plans should include definitions of terms that are unique to the facility under consideration or are given connotations that differ from normally accepted usage).

The ERP contains plans for dealing with realistic impediments to evacuation. The North Carolina Department of Transportation (DOT) is one of the principal response organizations identified in the ERP. The DOT routinely moves impediments to traffic moving on state highways. See ERP, Part 1, Section IV.E.8. Section III.J.1.f of Part 1 of the ERP gives to the DOT the responsibility, upon request, of assisting in the identification, containment or removal of evacuation impediments during a radiological emergency at the Harris plant. The County Annexes to the ERP, identified as Parts 2 through 5 of the ERP, contain parallel provisions. See ERP Parts 2-5, Section

IV.E.10. The State intends to keep one lane of evacuation routes free for emergency vehicles and other usages. Evacuation Time Estimate, Section 2.2 (concurred in by State and local officials). The State Highway Patrol will monitor and control traffic, with the assistance of the National Guard, the Division of Motor Vehicles, and county sheriff departments. ERP, Part 1, Sections III.B.2, III.B.3.h and III.J.2.b; Parts 2-5, Section III.D. In addition, the evacuation highway network consists of multiple, interlocking routes. If one route is blocked by an accident, traffic can be diverted to another route. Evacuation Time Estimate, Sections 5.2 and 5.3; see also Annex H to the Shearon Harris Nuclear Power Plant Emergency Plan, Rev. 2 (February 1984) (identifies evacuation routes).

To the extent that Mr. Eddleman refers in his five proposed impediment contentions to any specifics that he believes should be included in the ERP that are not there, his recommendations either are based on hypothetical, remote events for which the State need not plan, see Revised Contention 117 and proposed Contention 118 (wrecked or abandoned hazardous cargo), Revised Contentions 117 and 117-A (train derailings), or are advocating a level of detail not required in the ERP, see proposed Contention 57-C-4, 57-C-5, Revised Contention 117. Because the ERP adequately plans for the removal of impediments to evacuation, Eddleman proposed Contentions 57-C-4, 57-C-5, Revised Contentions 117 and 117-A and proposed Contention 118

lack the requisite basis. Accordingly, they should be rejected by the Board.

TRANSPORTATION-GENERAL PUBLIC

Revised proposed Contention 57-C-14 characterizes the ERP as "inadequate", becuase of its allegedly insufficient treatment of evacuation route capacities, and because it allegedly fails to establish in advance pickup points for people without transportation, fails to assure adequate transportation can get to pick up points "in time," and fails to identify in advance persons without transportation, to advise them where to go for pickup.

Because the capacities of the evacuation routes were first addressed in the Evacuation Time Estimates -- served on all parties on December 29, 1983 -- the proposed contention is untimely to the extent it challenges the evacuation route capacities. In any event, Mr. Eddleman has not specified his concern about the route capacities, nor has he provided any sort of basis for his concern, whatever it may be. The contention is therefore objectionable on a number of grounds.

Similarly, Mr. Eddleman has not indicated why it is necessary to identify pick up points in advance. Nor has he specified a basis for requiring the pre-identification of persons without transportation -- except to advise those persons of pre-identified pickup points. Certainly he has not

indicated why it is not sufficient to provide such details to the public as part of the informational message broadcast at the time an evacuation is ordered, as is presently planned. See ERP, Annex C, Section C.2.d; Annex D. Accordingly, in the absence of any specific criticisms of present plans, and in the absence of any specified rationale for his proposal requirement, this portion of Mr. Eddleman's contention must be rejected as lacking in basis and specificity.

To the extent the proposed contention could be read to seek the pre-identification of persons without transportation to facilitate advance resource planning for an evacuation, the necessary data has already been compiled. In the preparation of the Evacuation Time Estimate, census data was used to estimate the number of non-auto-owning households in each of the four counties. Mr. Eddleman has not even referenced this data; certainly he has not indicated any insufficiencies in its use for planning purposes.

Finally, that portion of Mr. Eddleman's proposed contention expressing concern about the adequacy of transportation resources to get to pickup points "in time" constitutes an attack on the Commission's emergency planning regulations. There simply is no particular time frame within which evacuation mus be completed. See The Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-730, 17 N.R.C. 1057, 1069 n.13 (1983). If evacuation could not be completed before the

release of significant radiation, sheltering would be the protective action of choice. In any event, Mr. Eddleman has provided no substantive basis to challenge the availability of resources for the evacuation of the transportation-dependent population. See, e.g., ERP Part 1, Section IV.E.4.a (commercial buses); Section III.C.3.b(1) (National Guard); Section III.G.1.b (Division of Forest Resources); Section III.H.6 (Wildlife Resources Commission); Section III.J.1.d (Division of Highways); Section III, Figure 4 (re: "Transporation"); Section IV.E.4.f (listing State organizations which will provide supporting transportation). See also ERP Part 5, Section IV.E.8.d (indicating use of school buses). In sum, because proposed Contention 57-C-14 constitutes a challenge to the Commission's emergency planning regulations, and because it is lacking in basis and specificity, the proposed contention must be rejected.

Like proposed Contention 57-C-14, new proposed Contention 237 challenges the availability of resources for the evacuation of the persons without transportation. In addition, proposed Contention 237 also questions whether vehicles could reach pick up points without conflicting with the flow of evacuation traffic, and required for evacuation of this population.

However, Mr. Eddleman has not even attempted to address the extensive information on the availability of resources for the evacuation of persons without transportation. See, e.g.,

ERP Part 1, Sections IV.E.4.a, III.C.3.b(1), III.G.1.b, III.H.6, III.J.1.d, IV.E.4.f, Figure 4 (re: "Transportation"). See also ERP Part 2, Section III.L.7; Part 3, Section III.L.6; Part 4, Section III.M.7; Part 5, Section III.T.5. Because Mr. Eddleman has failed to address the available relevant documentation, his proposed contention lacks the specificity required of a litigable contention. Moreover, mere curiosity or skepticism alone do not supply a sufficient basis for a contention.

Mr. Eddleman's concerns about the ability of vehicles to travel to pickup points without being caught in evacuation traffic similarly lack basis and specificity. In any event, the concerns are of no moment. In an evacuation, roads will be operated with normal two-way traffic patterns, so that one lane will be essentially open at all times for emergency vehicles (such as buses traveling to pickup points). See Evacuation Time Estimate, Section 2.2. Thus, this part of the proposed contention must also be rejected as lacking the requisite bases with specificity.

Finally, contrary to the assertion of the contention, the time required to evacuate the transportation-dependent population is explicitly treated in the Evaluation Time Estimate. See, e.g., Section 3.1.2. Therefore, this portion of the contention, too, is baseless, and must be rejected. Further, because this portion of the contetion is premised on the Evacuation Time Estimate (which has been available since December 29,

1983), the proposed contention must also be rejected for lack of timeliness.

Accordingly, Applicants oppose the admission of proposed Contention 237 in its entirety.

TRANSPORTATION-SPECIAL POPULATIONS

Deferred proposed Contention 139 generally charges that evacuation planning for the Harris plant fails to adequately provide for "the transient population engaged in recreational activities" in the area near the plant. Particularly, proposed Contention 139 alleges that evacuation planning is inadequate to remove the peak transient population, due to a laundry list of alleged deficiencies including "unmonitored releases" and "inadequate evacuation planning, personnel and equipment." These generalized assertions -- originally formulated without reference to the emergency plans and never amended -- clearly lack the specificity required of a litigable contention. Nor has Mr. Eddleman supplied any bases for his charges. Thus, the proposed contention must be rejected on those grounds alone.

Further, to the extent that resources are alleged to be insufficient to evacuate the transient population "in time," the proposed contention effectively constitutes an impermissible challenge to the Commission's regulations, by its implicit assumption that evacuation must be accomplished within some particular (albeit unspecified) time frame. To the

contrary, as the Appeal Board has recognized, "the Commission's emergency planning regulations do not specify the time within which the plume EPZ must be evacuated in the event of a nuclear emergency. 10 C.F.R. Part 50, Appendix E, § IV, requires only that applicants provide 'an analysis of the time required to evacuate . . .'* * *." The Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-730, 17 N.R.C. 1057, 1069 n.13 (1983). Accordingly, this aspect of the proposed contention is also objectionable as a challenge to the regulations.

Mr. Eddleman also asserts that "only [the] population within 5 miles of SHNPP is considered" in planning. Again, the contention is framed without reference to any of the relevant sections of the ERP, and is baseless. Annex G to the ERP "establishes the organizational responsibilities and procedures for emergency warning and notification of boaters on Jordan Lake and recreation areas around the lake within a 10-mile radius of the Shearon Harris Plant." ERP, Annex G, Section I (emphasis supplied). Accordingly, these allegations must also be rejected.

Finally, proposed Contention 139 alleges that the recreating population within 20 miles of the Harris plant should be considered in evacuation planning since, it is asserted, "Class 9" accidents "have their effects reach well beyond ten miles of the plant." This part of the proposed contention must be rejected as a clear challenge to the

Commission's emergency planning regulations defining the plume EPZ. See 10 C.F.R. § 50.47(c)(2). Thus, for all the above stated reasons, proposed Contention 139 must be rejected in its entirety.

Deferred proposed Contention 140 broadly asserts that the emergency plans of Applicants, the State and local governments, and FEMA are inadequate because they do not provide for the "prompt and safe" evacuation of the recreating populations described in proposed Contention 139. Applicants object to that portion of the contention which deals with FEMA, on the grounds that it constitutes a challenge to the Commission's emergency planning regulations, which recognize that responsibility for the evacuation of the public rests primarily with state and local authorities. See 10 C.F.R. § 50.47(b)(10) and NUREG-0654, Criterion J.9. Moreover, to the extent the proposed contention relates to Applicants' on-site plan, the contention is untimely in the extreme; that plan was served on the parties in March, 1983, and any proposed contentions based thereon were due within thirty days.

Finally, even as the proposed contention relates to the emergency plans of the State and local governments, it is fatally lacking in specificity and basis. Mr. Eddleman's broad-brush assertions were originally framed in the absence of the emergency plans; but the allegations have never been amended to specify the particular alleged inadequacies with

which Mr. Eddleman is concerned. Accordingly, they are so lacking in clarity and specificity that they utterly fail to put the other parties on notice of the issues for litigation, and must therefore be rejected.

Deferred proposed Contention 88, while cast in terms of cost-benefit analysis, is apparently intended as a substantive challenge to the feasibility of evacuation of the Harris Reservoir in the event of an accident. However, to the extent that Mr. Eddleman has concerns about "establishing adequate transport, warning, medical treatment and other emergency response facilities, means, plans and the hiring of trained personnel to carry them out," he has simply failed to specify the concerns here. He initially drafted the proposed contention without the emergency plans; however, he has failed to further specify it in any way although all the relevant emergency plans are now available. Nor has he ever provided any basis to support his sweeping allegations. The proposed contention should be rejected on these grounds alone.

Moreover, to the extent that Mr. Eddleman has concerns about warning evacuation transportation, and the time required for evacuation of Harris Reservoir, his proposed contention is late. Both the Harris site emergency plan (served on the parties on March 29, 1983) and the Evacuation Time Estimate (served on the parties on December 29, 1983) included information on these subjects. Thus, the proposed contention should be rejected as untimely.

Finally, to the extent the proposed contention indicates that evacuation of a particular area "would be necessary" within a specified time, the contention constitutes a challenge to the regulations. There simply is no particular time frame within which evacuation must be completed. See The Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-730, 17 N.R.C. 1057, 1069 n.13 (1983). For all these reasons, Applicants oppose the admission of proposed Contention 88.

New proposed Contentions 235 and 236(A) and (B) largely overlap, and generally challenge the provisions of the ERP for the evacuation of the mobility-impaired. The thrust of proposed Contentions 235 and 236(A) is that the ERP allegedly fails to designate transportation resources for the evacuation of the home-bound individuals, nursing home residents, hospital patients, prisoners and the handicapped. To the contrary, non-ambulatory persons (including nursing home residents and hospital patients, as well as the home-bound) would be evacuated via ambulance by the county rescue squads or ambulance services. See, e.g., ERP Part 1, § IV.E.4.b. And Mr. Eddleman has failed to identify any "prison populations" to be evacuated; indeed, he cannot -- there are no prisons within the plume EPZ. Finally, to the extent the handicapped have access to private vehicles, they would evacuate as members of the general public. Those who are non-ambulatory would be evacuated as "home-bound" persons (described above), while those who are ambulatory would

be evacuated using vehicles such as school buses (see e.g., ERP Part 5, § IV.E.8.d.) and commercial buses (see ERP Part 1, § IV.E.4.a.). Thus, Mr. Eddleman's complaints that the ERP fails to identify transportation resources for specified populations are baseless.

Moreover, to the extent that Mr. Eddleman suggests that there are insufficient transportation resources for the evacuation of the identified populations, Applicants press their objection to the proposed contentions' lack of specificity and bases. Mr. Eddleman has completely failed to consult the available information in the formulation of his proposed contentions. Ignoring the wealth of specific demographic data available in the Evacuation Time Estimate and in the plans, Mr. Eddleman has failed to even hazard an estimate of either the number of ambulatory individuals who would need transportation assistance in an emergency or the number of vehicles available to provide such transportation. See, e.g., ETE § 3.1.2 (identifying number of households in EPZ not owning a car); Table 3-5 (providing estimate censuses for all hospitals, nursing homes and family care facilities, broken into ambulatory/non-ambulatory). Given the documentation available to Mr. Eddleman to cast his contentions, his allegations here can only be considered rank speculation.

Finally, while it is not clear what Mr. Eddleman means by "self transport capacity" in proposed Contention 236, if Mr.

Eddleman is asserting that each subject facility must have the transportation resources to evacuate its own residents or patients, Mr. Eddleman has provided no basis whatsoever for his proposal; certainly he has offered no basis for distinguishing this case from other cases where evacuation plans rely upon the use of transportation resources which are not owned by the facilities being evacuated. See, e.g., Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), LBP-81-59, 14 N.R.C. 1211, 1648-49 (1981). Clearly there is no regulatory bases for Mr. Eddleman's proposed "self transport capability" requirement, whatever it is.

For these reasons, Applicants oppose the admission of proposed Contentions 235 and 236(A) and (B), in their entirety.

New proposed Contention 204 is virtually incomprehensible. The contention asserts that the "[p]lan, page 13, points out the lack of radiation protection on National Guard helicopters. No other method of radiation protected evacuation for victims or patients who need life-support is provided . . ." (emphasis supplied). Applicants oppose the admission of this contention on several grounds

First, the cited basis does not support the proposed contention. The referenced page of the ERP indicates that the National Guard helicopters lack "life-support equipment," not "radiation protection" as the proposed contention indicates. Indeed, the referenced page of the ERP is silent on the subject

of the protection factor afforded by the National Guard helicopters. The contention must therefore be rejected for lack of basis.

In addition, Mr. Eddleman has completely failed to supply any factual basis whatsoever for the fundamental premise of his proposed contention -- that radiation-shielded transportation for non-ambulatory persons is necessary. Indeed, the ERP indicates that, to the contrary, sheltering would be the protective action of choice unless evacuation could be "completed prior to significant release and arrival of radioactive material in the affected area." See ERP Part 1, § IV.A.4.c. Again, then, the proposed contention lacks basis.

Further, Mr. Eddleman seems to suggest that there are no helicopters available for evacuation which carry life-support equipment. To the contrary, the ERP expressly recognizes the availability of the Military Assistance to Safety and Traffic (MAST) program to assist in transporting non-ambulatory persons to and from medical facilities. ERP Parts 2-5, § V.B.6.

Finally, there is no regulatory basis for the imposition of a requirement for the provision for evacuation of radiation-shielded helicopters supplied with life-support equipment. Accordingly, for all the above-stated reasons, proposed Contention 204 must be rejected.

New proposed Contention 230 challenges the adequacy of "transportation resources to evacuate all schools in the EPZ."

The proposed contention is several months late, without the requisite showing of "good cause." Although the proposed contention references the ERP, the Evacuation Time Estimate filed with the NRC staff -- and served on the Board and parties here -- on December 29, 1983, expressly noted that, in an emergency, all school children would be evacuated directly from their schools in school buses. See Evacuation Time Estimate, at 6-4 to 6-5. The Evacuation Time Estimate even included a list of the schools in the EPZ, with a breakdown -- by individual school -- of the number of students and staff, and identified the resources required to evacuate the schools. Evacuation Time Estimate Table 4-4; § 8.2. Thus, under the Board's standing rule requiring the filing of new contentions no later than thirty days after receipt of the document on which they are based, proposed Contention 230 was required to be filed no later than the end of January, 1984. See LBP-82-119A, supra, 16 N.R.C. at 2073 (1982). Accordingly, the proposed contention must be rejected as untimely.

Moreover, ignoring the wealth of specific data available in the Evacuation Time Estimate (as well as the ERP), Mr. Eddleman has failed to even hazard an estimate of the number of school students he asserts would need bus transportation in an emergency, the number of school buses that would be needed to evacuate school students in an emergency, or the number of school buses available to evacuate school students. See e.g.,

Evacuation Time Estimate § 6.2.5 (discussing availability of school buses); § 5.1 (describing the evacuation routes); Figure 3-4 (showing location of schools); Table 4-4 (listing all schools in EPZ, with numbers of students and staff per school). Indeed, Mr. Eddleman has not even cited the Evacuation Time Estimate's determination that approximately 100 school buses will be needed to evacuate the schools in the EPZ; certainly he has provided no basis whatsoever to question that determination. See Evacuation Time Estimate, § 8.2. Thus, given the documentation available to Mr. Eddleman to frame his contention, the allegations here amount to bold speculation. Accordingly, the contention must also be rejected as lacking in basis and specificity.

Finally, proposed Contention 230 effectively constitutes an impermissible challenge to the Commission's regulations, by its apparent assumption that some (unspecified) number of school buses must be "available" to evacuate school students within some particular (unspecified) time frame. But the Commission's regulations do not require that evacuation be completed within any particular period of time. The regulations require only that a license applicant provide "an analysis of the time required to evacuate. . .". See The Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-730, 17 N.R.C. 1057, 1069 n.13 (1983). Thus, Mr. Eddleman might conceivably have proposed a contention alleging, e.g., that

planning does not provide for the most efficient use of already available transportation resources, or that the Evacuation Time Estimate assumed the availability of more resources than would actually be available in an emergency. But the implication of proposed Contention 230 that some number of school buses must be available within some distance of the plant to ensure timely evacuation plainly cannot be sustained.

Accordingly, proposed Contention 230 must be rejected on the grounds that it is late-filed, lacking in the requisite basis and specificity, and an attack on the Commission's emergency planning regulations.

PERSONNEL MONITORING/DECONTAMINATION

New proposed Contentions 240 and 241 challenge the adequacy of the ERP's provisions for radiation monitoring and decontamination of members of the general public. In Contention 240, Mr. Eddleman acknowledges that local governments are responsible for shelter monitoring, but he asserts that the locations for evacuee monitoring and decontamination are not specified in the ERP. To the contrary, the ERP indicates that radiological monitoring and any necessary decontamination of members of the public would be performed at each county's designated shelters, which are specifically identified in the ERP. See ERP, Part 2, Figure 6; Part 3, Figure 5; Part 4, Figure 6; Part 5, Figure 7.

Mr. Eddleman further charges that the counties' "capabilities for decontamination have not been delineated." But each of the four counties has designated personnel responsible for performing any necessary decontamination, and those personnel are trained in radiation protection and radiological monitoring. ERP, Part 2, Sections IV.E.12, VII.C, Figure 6; Part 3, Sections IV.E.12, VII.C, Figure 5; Part 4, Sections IV.E.12, VII.C, Figure 6; Part 5, Sections IV.E.12; VII.C, Figure 7. The North Carolina Radiation Protection Section will provide additional assistance and specially equipped teams if significant problems are identified at any shelters. ERP, Part 1, Sections IV.G.6 and 7; Parts 2-5, Section IV.E.12. And when decontamination is to be conducted, a representative from the Shearon Harris Plant Environmental Radiation Control Unit or from SERT will be dispatched to the scene to supervise the decontamination and waste disposal activities, if possible. See ERP, Parts 2-5, Sections IV.F.6 and 7.

Finally, Mr. Eddleman expresses concern over the "availability of materials for decontamination." However, Mr. Eddleman has completely failed to specify what special materials he believes to be necessary for decontamination, beyond the soap and water available at the identified shelters. Accordingly, because Mr. Eddleman has failed to address the relevant substantive provisions of the ERP, and has failed to provide the requisite basis with specificity for his contention, proposed Contention 240 must be rejected.

Proposed Contention 241 asserts that the use of schools as decontamination sites is "entirely inappropriate" because, it is alleged, the schools will be left contaminated, "where children susceptible to radiation . . . will be later." However, despite the ERP's extensive discussion of radiological monitoring and decontamination (outlined above), Mr. Eddleman fails to provide any basis whatsoever for his apparent assumption that schools would be left contaminated. In particular, he has not even referenced -- and he certainly has not provided any basis to question -- the monitoring agencies' expressed intent to contain the wastes resulting from the decontamination process. See, e.g., ERP Part 1, Section IV.G.6. Proposed Contention 241 therefore lacks the basis and specificity required of a litigable contention, and thus also should be rejected.

RE-ENTRY/RECOVERY

Deferred proposed Contentions 100 and 100B and new proposed Contention 210 challenge the provisions for post-accident recovery and re-entry to the evacuated area.

Proposed Contentions 100 and 100B assert that the emergency plans are deficient in that they do not provide for the decontamination of farmlands, homes and food after "Class 9" and "Class 10" accidents, respectively. However, Mr. Eddleman references no authority which would require planning for decontamination of farmlands and homes, and Applicants know of

none. Rather, in promulgating the new emergency planning regulations, the Commission expressly rejected requiring such provisions, reasoning that "public health and safety should take clear precedence over actions to protect property. Measures to protect property can be taken on an ad hoc basis as resources become available after the accident." 45 Fed. Reg. 55402, 55407 (August 19, 1980). Applicants, therefore, oppose the admission of proposed Contentions 100 and 100B as challenges to the Commission's regulations, to the extent that those contentions assert that planning for the decontamination of farmlands and homes is required.

Further, Mr. Eddleman's generalized criticism of emergency planning for an alleged failure to provide for the decontamination of food clearly lacks the specificity required of a litigable contention. Mr. Eddleman has failed to acknowledge the ERP's detailed provisions for protective actions for the ingestion exposure pathway. ERP, Part 1, § IV.F. Nor has he recognized the provisions for "analysis of . . . samples of foodstuffs, foliage, and water collected within the EPZ" to continue throughout "[r]ecovery, re-entry, and post-accident operations," if necessary. ERP, Part 1, § IV.H. Thus, Mr. Eddleman's allegations with respect to protection of food supplies are also objectionable as lacking in basis and specificity.

Applicants further oppose proposed Contentions 100 and 100B -- as well as proposed Contention 210 (which broadly alleges a failure to establish adequate decontamination or recovery procedures) -- on the ground that those contentions seek to require a detailed level of planning beyond that envisioned by the Commission's emergency planning regulations.

The standard for re-entry and recovery is unlike the other planning criteria of 10 C.F.R. § 50.47 and NUREG-0654, which identify the need for specific information about implementing protective actions in the event of a radiological emergency. In contrast, only "general plans and procedures" need be developed for re-entry and recovery. See 10 C.F.R. § 50.47(b)(13); NUREG-0654, Criterion M.1; Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), Order (Concerning Miscellaneous Matters), August 17, 1983, attached transcript at 1086-87 (rejecting proposed contention as seeking level of detail not required in plans for recovery and re-entry). This is because the focus of NRC's emergency planning requirements is on the immediate hazard posed by a serious nuclear power plant accident. Advance planning for protective actions such as sheltering and evacuation is needed because there may be insufficient time, once the accident has occurred, to effectively respond in a manner that best protects the public's health and safety. After the fact, these considerations do not exist. There is ample time to plan for the recovery. Moreover, as a

practical matter, recovery plans "must -- and should -- be ad hoc." Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-82-39, 15 N.R.C. 1163, 1207 (1982), aff'd, ALAB-717, 17 N.R.C. 346 (1983). Thus, even the NUREG-0654 planning standard evaluation criteria for re-entry and recovery focus on the need to ensure conditions are appropriate to relax protective measures and, hence, permit re-entry. See NUREG-0654, Evaluation Criterion M.1. Recovery is secondary when the issue is emergency preparedness. Accordingly, proposed Contentions 100, 100B and 210 must be rejected as a challenge to the Commission's regulations.

MEDICAL CARE

The general thrust of deferred proposed Contention 56 and revised proposed Contentions 57-C-7, 57-C-8, and 63 is a challenge to the adequacy of provisions for medical care for "radiation victims." Litigation of these contentions is precluded under Commission case law interpreting 10 C.F.R. § 50.47(b)(12).

In Southern California Edison Co., (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-83-10, 17 N.R.C. 528 (1983), the Commission expressly held that 10 C.F.R. § 50.47(b)(12) does not require special medical arrangements or extensive advance planning for injuries to members of the general public in the event of a nuclear plant accident:

> With respect to individuals who become injured and are also contaminated, the arrangements that are currently required for on-site personnel and emergency workers provide emergency capabilities which should be adequate for treatment of members of the general public. Therefore, no additional medical facilities or capabilities are required for the general public. However, facilities with which prior arrangements are made or which have the capability to treat contaminated injured individuals should be identified. With respect to individuals who may be exposed to dangerous levels of radiation, treatment requires a lesser degree of advance planning and can be arranged for on an as-needed basis during an emergency. Emergency plans should, however, identify those local or regional medical facilities which have the capabilities to provide appropriate medical treatment for radiation exposure. No contractual agreements are necessary and no additional hospitals or other facilities need be constructed.

Id. at 536-37 (footnote omitted). In its Memorandum and Order implementing the Commission's decision, the San Onofre licensing board interpreted the Commission's ruling:

> [A]s to members of the off-site public who may suffer radiation injuries, a licensing board's proper inquiry is quite narrow -- whether existing medical facilities have been identified. That identification itself is to be deemed adequate to satisfy the rule as a matter of law, whether the existing facilities are many or few, subject only to the possibility of an exception under 10 C.F.R. § 2.758. Boards are not to go behind the list of existing facilities to determine whether those facilities are adequate (or inadequate) to cope with various accident scenarios in the site-specific setting.

Southern California Edison Co., (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-83-47, 18 N.R.C. 228, 232 (1983).

As proposed Contention 57-C-8 recognizes, the ERP clearly identifies the facilities that will support the plant and surrounding communities in the event of a radiological emergency. ERP, Part 1, § V.B; Parts 2-5, § V.B. Therefore, proposed Contentions 56, 57-C-7, 57-C-8, and 63 -- which contemplate provisions beyond those mandated by the Commission's decision in San Onofre -- must be rejected as challenges to the Commission's regulations.

TRAINING

Proposed Eddleman Contentions 212 and 243 generally raise the issue of the adequacy of the training provided to emergency response planners and workers. Proposed Contention 212 asserts that, due to the "sloppiness" of the ERP and the deficiencies asserted in other proposed Eddleman contentions, the emergency planners have not been properly trained. The broad-brush contention, which sets forth no specific deficiencies in the Plan, does not address the details set forth in the Plan, of the training to be provided to emergency planners. See Part 1 at 84-86, and § VII.C and D of Parts 2-5. Absent such specifics, proposed Contention 212 should be rejected as lacking basis with the requisite specificity.

Similarly, proposed Contention 243 does not attack the sufficiency of the training to be provided to emergency response workers, see id., but merely asserts that such training has not yet been provided. However, at this point in time, there is no requirement that such training be complete. See Applicants' Response to proposed CHANGE Contentions 4 and 30 (April 23, 1984 at 14, 52). This contention should therefore be rejected as lacking any basis in law.

EXERCISE

Revised proposed Contention 81 and new proposed Contention 208 both mount challenges to the provisions for the exercise of the ERP. In Contention 81, Mr. Eddleman notes that the ERP "has not been tested," and asserts that the North Carolina Department of Crime Control and Public Safety "has stated that it learns from each plan test and that a test of the plan should be made to show that it is workable." Indeed, the ERP provides for periodic drills and exercises to maintain emergency preparedness, in accordance with NRC and FEMA regulations and guidance. ERP Part 1, Sections VII.B., C and D. Mr. Eddleman has pointed to no deficiencies in these provisions. Thus, there is no dispute that the plan will be exercised; it is the timing of the exercise which Mr. Eddleman apparently contests.

As Mr. Eddleman concedes, 10 C.F.R. § 50.47(a)(2) provides that emergency preparedness exercises are not required for a

nuclear power plant operating license decision. Rather, the exercises "are part of the pre-operational inspection and thus [are] required prior to operation above 5% of rated power, but not for a Licensing Board, Appeal Board, or Commission licensing decision." 47 Fed. Reg. 30232 (July 13, 1982). See Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, 17 N.R.C. 346, 380 (1983); Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 N.R.C. 1076, 1107-08 (1983). Indeed, even the purported basis for Mr. Eddleman's contention does not specify when the ERP should be exercised. Accordingly, proposed Contention 81 must be rejected both as lacking basis and as a challenge to the Commission's emergency planning regulations.

The seeming thrust of proposed Contention 208 is that an exercise testing the public's ability to evacuate "under adverse weather e.g., snow, ice, fog, tornados or severe wind conditions or [between 1 a.m. and 6 p.m.]" should be required. But, to the extent the contention would require such an exercise as a precondition to plant operation up to 5% power, the contention must be rejected as a challenge to the Commission's regulations. See San Onofre, ALAB-717, supra. Similarly, § IV.F.1 of Appendix E to 10 C.F.R. Part 50 provides that full-scale exercises are to test as much of the emergency plans "as is reasonably achievable without mandatory public

participation" (emphasis supplied). Thus, to the extent that proposed Contention 208 contemplates a "practice evacuation" of the public under the specified conditions, the contention constitutes yet another impermissible attack on the Commission's regulations. See Waterford, ALAB-732, supra. Moreover, Mr. Eddleman has provided no basis to support the asserted need to demonstrate an ability to evacuate under such conditions. Indeed, in the face of such extreme adverse weather conditions, sheltering would be the protective action of choice. See, e.g., ERP Part 1, Fig. 11 (p.41). Proposed Contention 208 must therefore be rejected as lacking in basis, and as an attack on the Commission's emergency planning regulations.

PUBLIC INFORMATION/EDUCATION

New proposed Contention 227 asserts that the emergency public information brochure is inadequate because it is "missing" from the ERP, and because it does not contain certain information to be included in a brochure under NUREG-0654 and the Commission's regulations. Its companion contention, new proposed Contention 228 further asserts that Applicants "cannot be deemed to have met the requirements of 10 C.F.R. § 50.47(b)(7)" until it is demonstrated that the information described in proposed Contention 227 "will be or is in fact made available to the public on a periodic basis."

The emergency public information brochure is under development,17/ and thus has not yet been included in the ERP. However, while Mr. Eddleman does not refer to it, the ERP does include a description of the scope of the information to be included in the brochure to conform to the Commission's regulations and guidance. Moreover, contrary to the implication of the contention, the ERP expressly provides for the annual dissemination of the brochure, in accordance with NUREG-0654, Criterion G.1. ERP Part 1, § IV.D.2.

In such circumstances, where a commitment has been made that the requirements of NUREG-0654 will be met, overseeing the implementation of details (such as completion of the brochure) can properly be left to the Staff and need not be litigated in an adjudicatory hearing. See Licensing Board Memorandum and Order (Ruling on Wells Eddleman's Proposed Contentions Concerning Detailed Control Room Design Review (DCRDR)...) at 6, 11-13 (Oct. 6, 1983). Proposed Contentions 227 and 228 should therefore be rejected.

Mr. Eddleman's third contention on the emergency public information brochure, new proposed Contention 229, asserts that the ERP "violates" 10 C.F.R. § 50.47(a)(1) and (2) because it provides no means to verify the brochure "as having been

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17/ Applicants anticipate that the brochure will be available by July 1, 1984.

successful in its task of informing the public." Mr. Eddleman specifically recommends "a tearoff mail-in (prepaid postage) card on the brochure with checkoffs for 'received and understood' or 'not understood.'"

There is absolutely no regulatory basis for the imposition on State and local governments of the requirement Mr. Eddleman here advocates. Certainly 10 C.F.R. § 50.47(a)(1) and (2) impose no such requirement. Indeed, the only regulatory guidance even remotely related to Mr. Eddleman's proposed requirement expressly charges FEMA (in cooperation with the licensee and/or state and local government) with the responsibility to:

> . . .take a statistical sample of the residents of all areas within about ten miles to assess the public's ability to hear the alerting signal and their awareness of the meaning of the prompt notification message as well as the availability of information on what to do in an emergency.

NUREG-0654, at 3-3 to 3-4 (emphasis supplied). See also FEMA-43, "Standard Guide For The Evacuation of Alert and Notification Systems For Nuclear Power Plants" (September 1983), at N-4 to N-6. Thus, proposed Contention 229 must be rejected.

INGESTION EPZ

New proposed Contention 206 argues that the ERP is deficient because it does not expressly provide for "thc sheltering and placing on stored feed" of dairy cattle within 2 miles of the plant in a site area emergency, and within 10 miles of the

plant in a general emergency. Although Mr. Eddleman indicates that NUREG-0654 so provides, the pages cited in the contention do not provide for the "sheltering" of dairy cattle under any circumstances. Thus, Mr. Eddleman has offered no basis whatsoever to support the "sheltering" of dairy cattle.

Moreover, contrary to the implication of the proposed contention, the ERP does provide for the placement of cattle on stored feed. ERP Part 1, § IV.F.5.b. Further, with respect to the timing of such action, the ERP places express reliance on the "Recommendations for State and Local Agencies" of the U.S. Department of Health and Human Services, Food and Drug Administration regarding radioactive contamination of human food and animal feed (as published in the October 22, 1987 Federal Register), which supersede the guidance on which Mr. Eddleman relies. ERP Part 1, § IV.E.2.b; Parts 2-5, § IV.E.4. These new recommendations provide for the removal of lactating dairy cows from pasturage and the substitution of stored feed at the level of the preventive PAG (Protective Action Guide).

Thus, Mr. Eddleman has failed to even refer to the relevant sections of the ERP. Indeed, there is no indication that he has even reviewed those sections. Certainly, he has not pointed to any deficiencies in the recent federal guidance on which the State and local governments here rely. Accordingly, his proposed Contention 206 must be rejected as lacking in basis and specificity.

STAGE OF PLAN DEVELOPMENT

Revised proposed Contention 57-C-18 reflects the provision in the ERP that a Memorandum of Understanding between CP&L and the State will be included in a future revision of the ERP. The thrust of the proposed contention is largely an attack on the candor and competence "of CP&L and/or the State of NC." However, Mr. Eddleman provides no basis whatsoever for his allegations, beyond the mere absence of the Memorandum of Understanding. And the mere absence of such a memorandum in a draft emergency plan for a non-operating plant does not, by any means, call into question the characters of the State and CP&L.

Moreover, the Memorandum of Understanding will simply reflect information already included in the Harris on-site and off-site emergency plans, confirming the obligations of the respective parties under the applicable state and federal laws. And Mr. Eddleman has presumably embodied all his concerns with respect to the on-site plan and the ERP in other already submitted contentions. Certainly he has provided no further specificity here. This contention must therefore be rejected both as argumentation, which is not appropriate for litigation, and as lacking the specificity and basis required by the Commission's regulations.

Finally, the Memorandum of Understanding between Applicants and the State is not even required under the NRC's emergency planning regulations or NUREG-0654 guidance. See

Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), LBP-81-59, 14. N.R.C. 1211, 1602-03 (1981) (neither the Commission's regulations nor NUREG-0654 mandates letter of agreement between licensee and county). Accordingly, to the extent it seeks to compel the preparation of the subject Memorandum of Understanding, proposed Contention 57-C-18 also implicitly attacks the Commission's emergency planning regulations, and should be rejected on that basis alone.

New proposed Contention 211 is similar to proposed Contention 57-C-18, in that both criticize the ERP because it does not include identified summary-type materials. Specifically, proposed Contention 211 asserts that the ERP fails to comply with NUREG-0654 Criteria J.10.a and J.10.b, which -- respectively -- provide for (a) "[m]aps showing evacuation routes, evacuation areas, preselected radiological sampling and monitoring points, relocation centers in host areas, and shelter areas," and (b) "[m]aps showing population distribution around the nuclear facility . . . by evacuation areas. . .". Contrary to Mr. Eddleman's assertion, Criterion J.10.a does not require maps of the ingestion pathway emergency planning zone; rather, that criterion is -- on its face -- limited to the plume exposure pathway. Accordingly, that portion of proposed Contention 211 dealing with the ingestion pathway should be rejected, because it is not supported by the cited basis.

Mr. Eddleman is correct that the Operations Map is not presently included in Annex I to the ERP. The map is currently under development and is expected to be completed by September 1984. However, all the information which will be included in the map (shelter locations, monitoring points, population densities, evacuation routes, etc.) is currently available in other documents, such as the Evacuation Time Estimates and the ERP itself. The map itself will merely combine and summarize this information. In such circumstances, where a commitment has been made that the provisions of NUREG-0654 will be met, overseeing the implementation of details (such as completion of the maps) can properly be left to the Staff and need not be litigated in an adjudicatory hearing. See Licensing Board Memorandum and Order (Ruling on Wells Eddleman's Proposed Contentions Concerning Detailed Control Room Design Review (DCRDR)...) at 6, 11-13 (Oct. 6, 1983). Accordingly, proposed Contention 211 should be rejected in its entirety.

The thrust of revised proposed Contention 213-A is that the ERP contains "insufficient information about how it will be implemented," and that implementing procedures are necessary. However, Mr. Eddleman has failed to indicate in any way what information about implementation he would include in the ERP; nor has he indicated why that information (whatever it is) should be included in the plan. The contention is so general and lacking in clarity and precision that it utterly fails to

adequately put the parties on notice of the issues to be litigated. The contention is thus objectionable on the ground that it is wholly lacking in specificity and basis required by the Commission's regulations.

Moreover, the Commission's emergency planning regulations do not require that emergency plan implementing procedures be submitted for consideration in licensing hearings in order for the Commission to make its "reasonable assurance" determination. The Appeal Board recently held, in a similar case involving an intervenor's complaint that the procedures had not been made a part of the hearing record:

> [T]he Commission never intended the implementing procedures to be required for the "reasonable assurance" finding and thus to be prepared and subject to scrutiny during the hearing . . . [T]he Commission did not want licensing hearings to become bogged down with litigation about such details. Instead, the focus should be on whether the applicant's emergency plan [including the off-site plans] itself satisfies the 16 more broadly drafted standards of 10 C.F.R. § 50.47(b).

Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 N.R.C. 1076, 1107 (1983). Thus, while the NRC Staff and FEMA may concern themselves with the need for detailed implementing procedures to supplement the ERP, litigation of the level of detail sought by Mr. Eddleman is barred, and his proposed Contention 213-A must be rejected on the further ground that it constitutes a challenge to the Commission's regulations.

The seeming thrust of new proposed Contention 200 is that the ERP cannot be implemented "[w]ithout participating organizations." This truism is not disputed. However, to support his implication that "participating organizations" might not support the plan, Mr. Eddleman notes only the absence of signatures to the ERP. But, as Mr. Eddleman concedes, the ERP is presently only a "draft." Thus, the absence of signatures to the plan is no indication of any lack of "assurance it will be implemented." Indeed, the "participating organizations" have affirmatively evidenced their intent to cooperate in emergency preparedness for the Harris Plant by the signatures of the four County Departments of Emergency Management to letters of agreement in the Harris site emergency plan. See Shearon Harris Nuclear Power Plant, Unit 1, Plant Operating Manual, Volume 1, Part 2 (Rev. 2, 2/84), Annex A. Accordingly, the proposed contention must be rejected for lack of basis.

PLAN MAINTENANCE

Proposed Contention 99 asserts that the emergency plans are deficient in that they do not assure that the plans will be kept up to date with respect to certain categories of information. This contention, filed in 1982, does not address the emergency response plans and now is untimely with respect to the on-site plan and the Evacuation Time Estimates.18/ With

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18/ The ETE includes much of the additional information sought.

respect to the ERP, the contention fails to address the stated provisions for annual review, update and certification of the plan as current.19/ See ERP Part 1, Section VII.F (pp. 85-86); Parts 2-5, Section VII.D. Consequently, the contention lacks basis.

Proposed Contention 209, while filed after the ERP became available, simply restates Contention 99 and adds nothing to it. It should be rejected for the same reasons.

EMERGENCY WORKERS

Proposed Contention 245 broadly disparages the ERP for allegedly relying "too heavily" on volunteer personnel to effect an evacuation, suggesting that State and local emergency response personnel cannot be depended upon to respond to a radiological emergency in sufficient numbers.

The proposed Contention should be rejected for lack of basis and specificity. Mr. Eddleman has shown no basis for the allegation nor should it be assumed that emergency response personnel will not perform their assigned tasks. State and local emergency workers receive extensive periodic radiological emergency response training. ERP, Part 1, § VII.E. See also ERP, Parts 2-5, § VII.C., (discussion of radiological emergency response training of local personnel). In addition, all such

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19/ The regulation cited, 10 C.F.R. § 50.54(t), applies to the Licensee's plan.

personnel who may receive significant radiation exposure will receive thermoluminescent dosimeters. Emergency workers who enter or may enter areas where the external radiation exposure could exceed 10 percent of protective action guides will receive self-reading dosimeters so that they will be aware of the risks at all times. See ERP, Part 1, § IV.G; Parts 2-5, § IV.F. These measures provide reasonable assurance that State and local emergency response personnel will perform in a professional manner under any radiological emergency situation that may arise.

Mr. Eddleman's allusion to an unspecified study conducted by Kai Erikson in the Shoreham area -- a different locale, and an unusual political milieu -- has no relevance to the North Carolina situation. Nevertheless, it should be noted that other licensing boards have considered similar contentions and concluded, despite testimony from Erikson upon which intervenors relied, that there was reasonable assurance that adequate numbers of emergency workers would stay and perform their jobs in the event of a nuclear emergency. Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), LBP-81-59, 14 N.R.C. 1211, 1486-89 (1981); Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-82-70, 16 N.R.C. 756, 767-68, 804-05 (1982); Consolidated Edison Co. of New York (Indian Point, Unit No. 2), LBP-83-68, 18 N.R.C. 811, 955-60 (1983). Indeed, in rejecting intervenors' claims

that volunteer emergency workers would suffer "role conflict" between their family responsibilities and emergency duties, as well as claims that radiological emergencies differ from other emergencies because the "threat" of radiation is "invisible and of uncertain duration," the Indian Point licensing board noted:

> Our finding does not disparage the opinion held by [intervenor's witnesses] Drs. Erikson and Lifton. These witnesses are credible experts. However, the theory they advocate is unorthodox, lacks empirical support, and is contradicted by the equally credible opinion of Licensees' witnesses. [who testified that "[w]ith respect to emergency workers, both lay and professional, past experience demonstrates that these workers will fulfill their duties"].

18 N.R.C. at 958 (emphasis supplied); see also 18 N.R.C. at 957.

Thus, Mr. Eddleman's references to Erikson's work can provide no basis for the allegations of his proposed contention. Certainly, Mr. Eddleman has offered no indication that State and local emergency workers in this area are unreliable. Indeed, North Carolina emergency workers -- both paid and volunteer -- are on record as performing their assigned functions in the face of imminent life-threatening situations, such as the recent tornado disaster in eastern North Carolina. Accordingly, proposed Contention 245 must be rejected for lack of basis.

EXPERIENCE/COMPETENCE

Proposed Contention 124 asserts that Applicants and the counties do not have the experience and technical ability to plan for a radiological emergency and implement protective measures. No explanation is provided as to why Mr. Eddleman believes this is so. The contention also fails to address the ERP in any way. See ERP Parts 2-5, Section VII (Plans, Exercises, Drills, and Training). Consequently, the contention is nothing more than a hopelessly broad opinion, with no asserted factual basis -- specific or otherwise.20/

Proposed Contention 242 criticizes the ERP because of a few typographical errors which reflect the fact that the State of North Carolina utilized its plans for other nuclear facilities in the state as a basis for the Harris plan.21/ The ERP is a draft at this point and the opportunity remains to make such corrections before response readiness is required. Further, it is desirable and important that the State plans be standardized to simplify and enhance its response capability. The proposed contention raises no litigable issue with respect to emergency preparedness.

20/ In addition, the cited NUREG-0654 Evaluation Criterion, J.9, does not apply to the licensee.

21/ See, in the same view, Eddleman Contention 114 on the Virgil Summer plant, and generally pages 229-239 of Supplement to Petition to Intervene by Wells Eddleman (May 14, 1982), with copied contentions and inserts to change the name of the plant criticized.

ON-SITE PLAN

Proposed Contention 151 originally asserted that Applicants' on-site plan "does not provide the medical personnel available to treat personnel injured onsite, [as] required by NUREG-0737 Rev. 1, p. 17, re 10 C.F.R. 50 Appendix E, item 5" (regarding arrangements for the services of physicians and other medical personnel qualified to handle radiation emergencies onsite). The sole basis advanced for the contention was a reference to Annex A to the plan (entitled "Agreements"), which itself indicated that letters of agreement with physicians were being obtained.

In its November 1, 1983 Memorandum and Order (Ruling On Wells Eddleman's Proposed On-Site Emergency Planning Contentions), the Board deferred ruling on Contention 151, and directed Applicants to provide "specific names of physicians who have agreed to treat personnel injured on-site, or by demonstrating reasonable assurance that such agreements will be made." Memorandum and Order, at 4. On February 1, 1984, Applicants served on the Board and the parties a letter of agreement with North Carolina Emergency Medical Services, Inc., signed by three physicians.

Although Mr. Eddleman failed to amend his deferred contention within 30 days of receipt of the letter of agreement, the Board invited the parties to file comments on the letter, during the March 8, 1984 conference call. Accordingly, on

April 3, 1984, Mr. Eddleman filed an amendment to his proposed Contention 151.

In his amendment, Mr. Eddleman expresses concern as to whether the physicians will have training to treat radiation-related injuries. Indeed, the letter of agreement itself reflects CP&L's commitment to sponsor training for the physicians in handling radiation accidents. Further, the Hrris on-site plan indicates:

> Training of medical support personnel at the agreement hospitals will include basic training on the nature of radiological emergencies, diagnosis and treatment, and follow-up medical care.

On-site plan, Section 5.2.3.15. Thus, Mr. Eddleman has failed to address the relevant section of the applicable plan, and has failed to provide any basis to support this portion of the revised proposed contention. Accordingly, it should be rejected.

Mr. Eddleman also queries whether the signatory physicians are required "to stay in the area near Harris or to continue to be bound by their agreements in the future." The letter of agreement is with North Carolina Emergency Medical Services, Inc., corporate entity, and is signed by the physicians in their capacities as officers of the corporation. Thus, the agreement would survive even should one of the physicians leave the area permanently. And, like other letters of agreement, the letter of agreement with the physicians must be certified to be current on an annual basis. See On-site plan, Section

5.1.2; NUREG-0654, Criterion P.4. Thus, should the physicians decline to renew their agreement at some point, CP&L would be obligated to replace the agreement with another. Mr. Eddleman's concerns about the currency of the letter of agreement are therefore also without basis. For these reasons, deferred proposed Contentin 151 should be rejected in its entirety.

Also in its November 1 Memorandum and Order, the Board deferred ruling on Contention 157, which asserted that the Harris on-site plan did not comply with the NUREG-0737 (Rev. 1) provision "which required the TSC [Technical Support Center] to be designed in accord with good human factors engineering." In support of this charge, Mr. Eddleman alleged only that the plan did not "mention human factors engineering with respect to TSC" and did not in any other way indicate that human factors engineering principles have been considered in the design of the TSC. To the contrary, section 3.3.1 of the plan ("Technical Support Center (TSC) -- Characteristics") expressly provided, even then, that the TSC was "[d]esigned taking into account good human factors engineering principles." Nevertheless, the Board directed that Applicants "provide their human factors engineering documents to the NRC." On February 17, Applicants filed with the Board and the parties a document describing

generally the consideration given to good human factors engineering principles in the design of the SHNPP TSC.22/ That document detailed the applicable standards used in design, and discussed the application of human factors analysis with respect to the physical layout and location of the TSC, noise control, display systems and computers, the heating, cooling and ventilation system, the electrical system, communcations and protective/emergency systems. In addition, the document included a furnishings plan for the TSC.

Pursuant to the Board's March 8 invitation to comment on the TSC human factors document, Mr. Eddleman amended his deferred proposed Contention 157 on April 3, 1984. Mr. Eddleman's amendment to his proposed contention is nothing more than a recitation of the virtues of good human factors engineering -- he has completely failed to identify any deficiencies in the information provided by Applicants. Indeed, he has not even related his comments to the information filed in response to his proposed contention. Certainly he can no longer assert that there is no written evidence that human factors engineering was considered in the design of the TSC. Thus, because there is no basis whatsoever for proposed Contention 157, that contention must be rejected.

22/ In providing the document, Applicants observed that NUREG-0737, Supplement 1 does not require the submittal of any documentation of the consideration given to human factors engineering in the design of a TSC.

Mr. Eddleman has resubmitted for ruling two deferred proposed contentions which, by their very terms, are limited to Applicants' on-site emergency planning -- deferred Contentions 103 and 137. Proposed Contention 103 challenges the shielding of "[t]he on-site counting laboratory at SHNPP," and proposed Contention 137 is a string of disparate allegations of asserted inadequacies in Applicants' site emergency plan which allegations were drafted long before Applicants' site emergency plan was even available, and therefore are necessarily lacking in specificity and basis).

Applicants' site emergency plan was served upon the parties on March 29, 1983. Based on that document, Mr. Eddleman proposed ten new on-site planning contentions, and affirmed his intent to pursue twelve deferred contentions, assertedly related to on-site planning. See Wells Eddleman's Contentions re CP&L Site Emergency Plan (SHNPP Operating Manual, Volume 3, Book 1), May 2, 1983. Mr. Eddleman failed to reassert at that time either proposed Contention 103 or proposed Contention 137. Certainly, the filing of the North Carolina Emergency Response Plan affords Mr. Eddleman no occasion to reaffirm interest in deferred contentions critical of the site emergency plan. Proposed Contentions 103 and 137 must therefore be rejected as untimely.

CONCLUSION

Applicants oppose admission of all of the proposed Eddleman contentions.

Respectfully submitted,

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DATED: April 28, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
CAROLINA POWER & LIGHT COMPANY	)	Docket Nos. 50-400 OL
and NORTH CAROLINA EASTERN	)	50-401 OL
MUNICIPAL POWER AGENCY	)	
	)	
(Shearon Harris Nuclear Power	)	
Plant, Units 1 and 2)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Applicants' Answer to Eddleman Proposed Contentions on SHNPP Emergency Response Plans" were served this 28th day of April, 1984, by deposit in the U S. mail, first class, postage prepaid, upon the parties on the attached Service List, except that those whose names are marked by an asterisk have been served by hand, this 28th day of April, 1984.

Thomas A. Baxter

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(Shearon Harris Nuclear Power	)	
Plant, Units 1 and 2)	)	

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