

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
 )  
DUKE POWER COMPANY, et al. ) Docket Nos. 50-413  
 ) 50-414  
(Catawba Nuclear Station, )  
Units 1 and 2) )

APPLICANTS' RESPONSE TO "PALMETTO ALLIANCE  
AND CAROLINA ENVIRONMENTAL STUDY GROUP  
SUPPLEMENT TO PETITIONS TO INTERVENE  
REGARDING EMERGENCY PLANS"

Duke Power Company, et al. ("Applicants") hereby  
respond to the Supplement to Petitions to Intervene  
("Intervenors' Supplement") filed, pursuant to order of  
the Board, on July 11, 1983 by Carolina Environmental  
Study Group ("CESG") and Palmetto Alliance (hereinafter  
referred to collectively as "Intervenors").

Several general principles of NRC practice underlie  
objections common to many of the proposed emergency plan  
contentions. These legal principles are discussed in  
section I, below. In addition, Applicants have set forth  
their particularized response to each specific contention  
in section II. Applicants do not oppose admission of  
proposed Emergency Plan contentions 1, 9 (in part), 14 (in  
part) and

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15 (in part).<sup>1</sup>

I. General Legal Objections

Applicants oppose admission of certain of these emergency plan contentions on one or more of several grounds. First, many of the contentions do not have their supporting bases "set forth with reasonable specificity" and thus do not meet the requirements set forth in 10 C.F.R. §2.714(b) of the Commission's rules. In addition, some of these contentions constitute an attack on standards and requirements contained in Commission rules and regulations. Absent a showing of "special

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<sup>1</sup> Consistent with representations made during the July 18, 1983 conference call, Applicants reviewed closely the proposed Emergency Plan contentions to determine whether, in their judgment, they could agree that any, or all, could be admitted as issues in this proceeding. Applicants concluded they could agree that proposed Emergency Plan Contentions 1, 8, 9 (certain parts), 14 (certain parts), 15 (certain parts), 17, 18 and 19 (certain parts) were admissible, even though in their view some of these contentions were defective in that they lacked, for example, specificity and bases or were untimely. Therefore, Applicants contacted Intervenor and offered not to oppose admission of these proposed Emergency Plan contentions, notwithstanding their reservations, in exchange for Intervenor withdrawing some or all of the remaining proposed Emergency Plan contentions. Intervenor was unwilling to withdraw any of their contentions.

Therefore, Applicants reviewed once again the proposed contentions, and determined that, in their view, the defects in proposed contentions EP 8, 9(a), 17, 18 and 19 could not be overlooked. Thus Applicants are compelled to object to those contentions as well.

C.F.R. §2.758, such issues may not be litigated in this proceeding. Third, some of these contentions are untimely. Under the requirements of §2.714 Intervenor are required to make a showing that the contentions meet the standards for admission as late-filed. Their failure even to address this issue, much less make the necessary showing, directly contravenes the Commission's recent decision on ALAB-687, with which Intervenor should be familiar.<sup>2</sup> See Duke Power Co., et al. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, \_\_\_ NRC \_\_\_ (June 30, 1983).

A. Basis and Specificity

Intervenor should be well familiar by this time with the Commission's basis and specificity requirements of 10 C.F.R. 2.714. This Board made clear its view that strict adherence to this regulatory provision will be required in this proceeding. Rejecting Intervenor's objections to the "burden of further specification" of their contentions, the Board stated over a year ago that:

Given the availability of information, the Commission's requirement of specificity in contentions is certainly reasonable. Assuming as we do the seriousness of the Intervenor's intentions, they will have to read and analyze relevant material as it becomes available. In that context, it is not unfairly burdensome to require them to add more specificity to their presently vague contentions. Indeed, the burdens involved in that task will be minor

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<sup>2</sup> See n. 7, infra.

compared to those involved in the eventual litigation of this case. [July 8, 1982 Order at 3-4].

Despite the Board's clear direction to the Intervenor, and despite Intervenor's experience in drafting contentions in this and other NRC proceedings, many of the proposed contentions consist merely of broad and unsupported allegations that the offsite emergency plan is inadequate in its treatment of various matters. In many instances, the Intervenor has neglected to identify specific defects or inaccuracies, thereby failing to provide a sufficient basis in support of their allegations. In other instances they assert that the plans fail to consider certain issues or consider them inadequately, but do not offer any rationale as to why inclusion of these topics is required. Far from providing sufficient notice that Intervenor "seek resolution of concrete issues," such proposed contentions serve only to indicate the Intervenor's general and unfocused displeasure with the offsite emergency plans. Bald assertions of this type do not comply with the Commission's rules regarding admissible contentions.

It is beyond contravention that Intervenor has been on notice, and in possession, of all relevant documents dealing with emergency plans for the facility. Thus, the Board, consistent with its earlier statements, should now



judge closely the contentions for specificity and reject those it finds "unduly vague." Duke Power Co., et al. (Catawba Nuclear Station, Units 1 and 2), LBP-82-16, 15 NRC 566, 575 (1982). Such a position is consistent with Intervenor's "ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable it to uncover any information that could serve as the foundation for a specific contention." Duke Power Co., et al. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982); CLI-83-19, slip op. at p. 6. Applicants accordingly submit that contentions failing to measure up to these standards should not be admitted.

A particularly egregious example of Intervenor's failure to meet the specificity and basis requirements appears in their proposed Contentions 12 and 13. Contention 12 is identical to Palmetto Alliance's original proposed Contention 4, which was filed in December, 1981; Contention 13 is virtually identical to Palmetto Alliance's original proposed Contention 3 (filed the same date), except that the last sentence of the original contention has been omitted. In its March 5, 1982 Order, the Board characterized these contentions as "extremely vague" (p. 16), but conditionally admitted them subject to revision upon the availability of Applicants' emergency

plans. Subsequently, the Board vacated those portions of the March 5 Order admitting these contentions and ruled that neither contention met the specificity requirements of §2.714. December 1 Order, at p. 4.

Intervenors' resubmittal of these same broad and conclusory contentions, which have already been rejected once by the Board, reflects a clear disregard of their obligations as parties to this proceeding and a deliberate flaunting of the pronouncements of the Board. Surely, if these two contentions were held not to satisfy §2.714 when filed before the issuance of the emergency plan, their deficiencies are even more apparent now that Intervenors have had ample access to the plans. Given Palmetto Alliance's and CESG's experience as participants in NRC proceedings, their obvious familiarity with emergency planning contentions accepted in other proceedings, and the ample instruction which they have been given by the Board over the past 18 months on how to prepare, frame and file adequate contentions in this proceeding, their proffering of Contentions 12 and 13 at this late stage is inexcusable.

B. Challenge to Commission Regulations

Again, Intervenors are well aware of NRC regulations which provide that, absent special circumstances, "any rule or regulation of the Commission, or any provision thereof...shall not be subject to attack by way of discovery, proof, argument or other means in any adjudicatory proceeding involving initial licensing...." 10 C.F.R. §2.758(a). However, in several instances Intervenors raise a challenge to Commission regulations without any showing of "special circumstances." Given the clear language of §2.758, such contentions cannot raise an issue subject to resolution in this proceeding and must be denied.<sup>3</sup>

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<sup>3</sup> CESG and Palmetto have requested on pp 1-2 of their Supplement that they be notified if their proposed contentions are to be construed as an attack upon the Commission's regulations, so that they may be "permitted to seek an exception or waiver of the application of such rule or regulation with respect to this particular proceeding." Both of these seasoned parties to the proceeding are entirely capable of discerning which of the contentions they have prepared could be so construed; neither merits the special treatment from the Board which they appear to request. Further, experience has shown that in the past such advice by the Board has been ignored by the Intervenors, who have not attempted to seek exemptions from or waiver of Commission regulations through the prescribed procedures. (See, e.g., the Board's notification to Intervenors at pp. 25-26 and 32-33 of its March 5, 1982 Order, and at p. 11 of its July 8, 1982 Order).

C. Failure to Address Criteria for the Admission of Untimely Contentions

In NRC proceedings where, as here, contentions are filed later than 15 days prior to the special prehearing conference (which in this case was held on January 12-13, 1982), those contentions are considered late-filed.<sup>4</sup> Such contentions are admitted only if the petitioner makes a sufficient showing under 10 C.F.R. §2.714(a)(1).

The party which seeks to have an untimely contention admitted must address each of the five factors set forth in §2.714(a)(1)<sup>5</sup> and affirmatively demonstrate that, on balance, they favor admission of the tardy submittal. See

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<sup>4</sup> Section 2.714(b) requires a list of contentions to be filed by an intervenor "[n]ot later than fifteen (15) days prior to the holding of the special prehearing conference pursuant to §2.751a, or where no special prehearing conference is held, fifteen (15) days prior to the holding of the first prehearing conference . . . ." 10 C.F.R. §2.714(b).

<sup>5</sup> These five factors are:

- (i) Good cause, if any, for failure to file on time.
- (ii) The availability of other means whereby the petitioner's interest will be protected.
- (iii) The extent to which the petitioner's participation may reasonably be expected to assist in developing a sound record.
- (iv) The extent to which the petitioner's interest will be represented by existing parties.
- (v) The extent to which the petitioner's participation will broaden the issues or delay the proceeding.

Duke Power Co. (Perkins Nuclear Station, Units 1, 2 and 3), ALAB-615, 12 NRC 350, 352 (1980), and cases cited therein. As the Appeal Board has emphasized:

in the instance of a contention that was susceptible of filing within the period prescribed by the Rules of Practice, the determination whether to accept it on an untimely basis involves a consideration of all five Section 2.714(a) factors -- and not just the reason (substantial or not as the case may be) why the petitioner did not meet the deadline. See Statement of Consideration accompanying amended Section 2.714(b), supra, 43 Fed. Reg. at 17799, citing Nuclear Fuel Services, Inc. (West Valley Reprocessing Plant, CLI-75-4, 1 NRC 273 (1975)). [Duke Power Co., et al. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 470 (1982)].

When the late-filed contention is based upon information contained in licensing-related documents -- such as the offsite emergency plan -- which are not required to be prepared sufficiently early in a licensing proceeding to provide a timely basis for framing contentions, the considerations governing admissibility become somewhat more complex. On the one hand, the unavailability of relevant licensing documents may have made it impossible for the intervenor to proffer sufficiently specific contentions at an earlier date. On the other hand, the information in question may have been publicly available from other sources early enough to provide the basis for a timely contention.



The criteria for determining admissibility of this class of late contentions were recently discussed in the Commission's ruling on two generic questions which arose from the Appeal Board's decision in ALAB-687. In this decision (Duke Power Co., supra, CLI-83-19), the Commission modified the approach taken by the Appeal Board and held that in making this determination, all five of the factors in 10 C.F.R. 2.714(a)(1) should be applied by the licensing board in question, including the three-part test for "good cause" set forth by the Appeal Board in ALAB-687.<sup>6</sup> In so ruling, the Commission stated that:

the five factors, together, are permitted by Section 189a. of the Act and are reasonable procedural requirements for determining whether to admit contentions that are filed late because they rely solely on information contained in licensing-related documents that were not required to be prepared or submitted early enough to provide a basis for the timely formulation of contentions. These procedural requirements are consistent with a petitioner's obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable it to uncover any information that could serve as the foundation for a specific contention.

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<sup>6</sup> The test prescribed by the Appeal Board in ALAB-687 is whether the late-filed contention

1. is wholly dependent upon the content of a particular document;
2. could not therefore be advanced with any degree of specificity (if at all) in advance of the public availability of that document; and
3. is tendered with the requisite degree of promptness once the document comes into existence and is accessible for public examination.

Accordingly, the institutional unavailability of a licensing-related document does not establish good cause for filing a contention late if information was publicly available early enough to provide the basis for the timely filing of that contention. [Duke Power Co., supra, CLI-83-19, slip op at pp. 5-6].

An obvious consideration which arises in regard to this class of late-filed contentions is whether there is "good cause" for admitting such a contention when the information actually relied upon was available early enough to provide the basis for a timely contention. In ruling on this question, the Commission (in CLI-83-19) began by emphasizing that "a person who invokes the right to participate in an NRC proceeding also voluntarily accepts the obligations attendant upon such participation" (Id. at p. 10), and that "since intervenors have the option to choose the issues on which they will participate, it is reasonable to expect intervenors to shoulder the same burden carried by any other party to a Commission proceeding." (Id.) Intervenors "must be taken as having accepted the obligation of uncovering information in publicly available documentary material." (Id. at p. 11).

These principles, the Commission held, plus the existence of "a substantial public interest in efficient and expeditious administrative proceedings" (Id. at p. 11), require intervenors in NRC proceedings to

diligently uncover and apply all publicly available information to the prompt formulation of contentions. Accordingly, the institutional unavailability of a licensing-related document does not establish good cause for filing a contention late if information was available early enough to provide the basis for the timely filing of that contention. [Id. at pp. 11-12]

A review of Intervenor's proposed contentions reveals that Palmetto Alliance and CESG have failed to meet their obligation to "apply all publicly available information to the prompt formulation of contentions." Several of these contentions focus on issues and concerns which are not specific to the offsite emergency plans and which could have been raised by Intervenor's months/years ago. Accordingly, good cause does not exist for the admission of these late contentions.<sup>7</sup>

For example, proposed Contention 2 is concerned with whether the information-gathering procedures to be used by Applicants' "mobile monitoring teams" and the use of thermoluminescent dosimeters can provide the "immediate" information required in emergency decision-making. These

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<sup>7</sup> Applicants are cognizant of the Board's instruction to Intervenor's that "[i]t will not be necessary for the Intervenor's to show in the first instance why each contention is "wholly dependent" on these [emergency] plans." (Memorandum and Order, June 13, 1983 at p. 9.) However, this instruction was superceded by the Commission in its Order Of June 30, 1983. The Commission's decision serves as the law of the case and is to be adhered to by all parties. Intervenor's failure to address this decision, and make the necessary showing, renders some contentions defective and deserving of denial.

concerns, which were in fact raised in Contention 27 (filed December 9, 1981), were clearly the focus of Intervenor's attention long before the issuance of the offsite emergency plan. Similarly, proposed Contention 7's emphasis on the need to stress to the public the concept of sheltering in the event of a severe accident is not "wholly dependent" upon the offsite emergency plans. Intervenor has been concerned with the issue of severe accidents and their consequences throughout this proceeding. (See, for example, CESG's original proposed Contention 9 on Class 9 accidents, which urges recognition that "local officials and resources are not qualified to assure protection of the public health and safety in the event of a serious accident." CESG's proposed contention 8 and 10 also dealt with severe accidents).

Other examples of issues which could have been raised much earlier in this proceeding appear in proposed Contention 9(a) -- which questions the viability of the fixed siren system -- and proposed Contention 10 -- which asserts that an independent group, rather than the Applicants, should have the responsibility for notification of the public and state and local officials. The use of a fixed siren system by Applicants and the fact that Applicants will alert and notify federal, state and local authorities (pursuant to applicable regulatory

requirements) are both discussed in previously filed documents. See Crisis Management Plan Appendix 3 (regarding fixed sirens) and Applicant's On-Site Emergency Plan, Section E which has been available to the Intervenor for almost one year. Similarly, proposed Contention 16(c)'s emphasis on whether "health personnel will agree to stay onsite to treat victims," (which Intervenor indicate is premised on experiences at TMI); proposed Contention 17's focus on the need to distribute potassium iodide, and proposed Contention 18's concern that local telephones are inadequate to handle the increased number of calls during an emergency, are not premised solely upon information contained in the offsite emergency plans and could all have been raised by Intervenor at the outset of this proceeding.

D. Conclusion

In sum, Applicants submit that neither Palmetto Alliance nor CESC are strangers to NRC proceedings. Both parties possess detailed knowledge of the procedural and substantive requirements imposed by Commission regulations and by NRC case law. Despite their familiarity with such standards, however, Intervenor have once again (in their third submittal of proposed contentions in this case) failed to satisfy the most fundamental requirements regarding the need for a basis and sufficient specificity



in contentions, the impropriety of filing contentions attacking NRC regulations, and the showing which must be made if a party wishes to file such a contention. Moreover, Intervenors have ignored the Commission's recent order in CLI-83-19 concerning the need for parties filing late contentions to address the criteria set forth in §2.714(a)(1) and the Appeal Board's "wholly dependent" test. These failures warrant denial of applicable contentions.

## II. Comment On Specific Contentions

### A. Contention EPl

Public information provided by Applicants and state and local officials is not adequate to ensure appropriate responses to notification procedures.

The principle source of information is Applicant's brochure, which is inadequate, intentionally deceptive regarding potential health effects of radiation, and misleading, in that:

A significant body of scientific evidence that indicates health effects at very low levels of radiation is not cited. Therefore, people with compelling reasons to stay (such as farmers tending to livestock) may not take the threat seriously, especially after being repeatedly told in the past that radiation is not particularly harmful, and that a serious accident is extremely unlikely. It does not indicate that there is danger in accumulated radiation dosage. It does not give adequate information on protection from beta and gamma rays. It does not specify how young "very young" is. There is no chart to indicate overexposure during non-routine releases or accident to put into perspective the possible dose received before or during an evacuation. It does not specify ingestion dangers from contaminated food and water. It does not specify the importance of

getting to reception areas for registration for purposes of notification for evacuees' re-entry to their homes, nor of emergency notification for evacuees, accounting for fiscal aspects of evacuation and for the basis of establishing legal claims which might result from the evacuation, as specified in "Catawba Site Specific NUREG Criteria" p. B2, #3. In fact, citizens are told they may go directly to "stay with friends or relatives living at least 15 miles from the plant" (p. 10 #5). Neither does it state that the reception areas exist to provide decontamination of people and vehicles. It states that in an emergency at Catawba, citizens "would be given plenty of time to take necessary action." This cannot be guaranteed in the event of a sudden pressure vessel rupture, where sheltering would be indicated. This eventuality is not mentioned. It assumes all recipients can read, and at a certain level of comprehension. As a primary source of information, it is imperative that all have access to and understanding of the emergency procedures to be taken. There is no information concerning the existence of a "plume exposure pathway," which would influence a citizen's choice of escape route. Although this information may be available via other media during a crisis, it is important for citizens to be aware of this phenomenon beforehand. Although the North Carolina state plan calls for emergency information to be distributed as detailed in Part 1, Section IV, 2, 3, and 4, no such material other than Applicants' brochure has been made available. When and if such material is formulated, it should include information on points of concern as listed in this contention. The emergency brochure falsely reassures residents that they "would be given plenty of time to take necessary action" in the event of an emergency. In the event of a vessel rupture, such as one resulting from a PTS incident, a catastrophic failure of the containment is a proximate likelihood. In that event, significant releases would reach residents well before they were able to remove themselves from harm even under Duke's overly optimistic evacuation time estimates.

Applicants do not oppose the admission of this contention.

B. Contention EP2

The information gathering procedures proposed by the mobile monitoring teams and thermoluminescent dosimeters are not adequate to provide emergency operations personnel with the immediate information required to make decisions necessary to reasonably assure the health and safety of the public under conditions of radiological release to the environment. Under accident conditions TLD's do not provide information quickly enough to adequately assist appropriate emergency decision making. Rather, they only provide a post hoc assessment of conditions. Similarly, mobile teams cannot provide timely and comprehensive information.

It is essential that information is gathered that is sufficient to:

1. quickly determine the direction of movement of radioactive clouds and the spatial characteristics of the cloud;

2. determine ground level dose rates in the cloud and adjacent areas and anticipate the pathway and ground level dose rates at points more distant from the site.

This information is vital for adequate emergency notification, evacuation, and post-evacuation activities. Without substantial improvements in the proposed plans' information gathering procedures and devices -- such as the installation of a fixed real time monitoring system -- the proposed plans cannot meet the reasonable assurance standard of NRC regulations [10 CFR 50.57(a)(3)]; nor can they comply with the regulatory requirements for adequate emergency planning [standards 4 and 9 of 10 CFR 50.47(g) (4) require a system to permit reliable and timely means for assessing and monitoring off-site releases during a radiological emergency].

Applicants oppose the inclusion of this contention in the form of an emergency plan contention. It is untimely, it lacks specificity and basis, and moreover it adds nothing to this proceeding which is not already in the proceeding in the form of Palmetto Alliance Contention No. 27.

As the Board and the other parties know, Palmetto Alliance Contention No. 27 is the subject of Motions for Summary Disposition filed by the NRC Staff on July 8 and Applicants on July 11. Palmetto Alliance's Contention No. 27 reads:

The Applicants should be required to place real time monitors capable of reading gamma radiation levels around the site in order to provide emergency operations personnel with information required to make decisions necessary to reasonably assure the health and safety of the public under conditions of radiological release to the environment.

Thermoluminescent dosimeters are only accurate within about plus or minus thirty percent and only provide a post hoc assessment of conditions.

Palmetto Alliance has stated on discovery that, in its Contention 27, it is contending that Applicants should be required to install a real time monitoring system of a specified nature to enable "Applicants and state and local personnel responsible for evaluation of monitoring data and decisions as to appropriate emergency protection action" to have "reliable and timely information as to the

magnitude and dispersion of an atmospheric release of radiation in the event of an accident." Palmetto Alliance Responses to Applicants Interrogatories dated April 19, (April 19 Responses) at p. 62. Such information is necessary, maintains Palmetto Alliance in its Contention No. 27, so that "effective protective action [can] be taken to minimize health and effects to the surrounding population. . . ." Id.

Palmetto Alliance asserts in Contention 27 that its proposed system has the advantage (over Applicants' system) of providing instantaneous "real time" data which cannot be provided by "mobile teams." Palmetto Alliance contends that its proposed system will provide information which will allow the decision-maker to: (1) determine the directions of movement of radioactive clouds and the spatial characteristics of the cloud; (2) determine ground level dose rates in the cloud and adjacent areas and anticipate the pathway and ground level dose rates at points more distant from the site; (3) with the above information, determine whether the release warrants action to protect the health and property of the public; and (4) provide information on which subsequent remedial measures may be based.



When the foregoing is measured against the language of proposed contention EPZ, it is clear that the proposed contention has nothing to offer beyond that already in the proceeding in the guise of Contention No. 27. Therefore on this basis alone it should be rejected. Further, to allow Palmetto Alliance essentially another opportunity to litigate a contention which is now, as shown by Applicants' Motion for Summary Disposition, ripe for decision, would permit Intervenors to obtain another bite at the apple. Such practice should not be condoned.

However, there are other, equally sound grounds on which this contention should be rejected. It is grossly untimely, and it lacks specificity and basis.

The methods and manner by which Applicants will provide information to the decisionmaker in the event of an emergency is spelled out in detail in the Duke Power Company Crisis Management Plan and the Catawba Nuclear Station (Onsite) Emergency Plan. These documents were identified in Applicants' September 22, 1982 Responses<sup>8</sup> to Palmetto Alliance's Interrogatories<sup>8</sup> ("Applicants'

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<sup>8</sup> In response to Palmetto Alliance's Interrogatory 3 which asked for a description of the "offsite monitoring system to be installed at Catawba". Applicants explained that this "system" was described in Section I of the Onsite Emergency Plan. (Response at p. 31) In response to Interrogatory 10, which asked for an identification of "any and all communications (footnote continued)

Response to Palmetto Alliance's Second Set of Interrogatories and Requests to Produce"). Those documents (among the others also identified) were available for inspection and copying by Palmetto Alliance on and after October 4, 1982 at Duke's offices in Charlotte. In light of this, it is clear Palmetto Alliance has defaulted on its "ironclad obligation" to examine completely the "publically available documentary material pertaining to the facility in question with sufficient care to enable it to uncover any information that could serve as the foundation for a specific contention." Duke Power Company, et al, (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982). Therefore under any circumstances this contention is untimely.

The contention also lacks specificity and bases. As this Board has recognized, where substantial information is available to Intervenor, it is incumbent on them to articulate precisely their concerns and to provide the bases for those concerns. Duke Power Company, et al, (Catawba Nuclear Station, Units 1 and 2) "Memorandum and Order (Reflecting Decisions Made Following Prehearing

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with the NRC on the subject of offsite radiological monitoring systems" Applicants identified both the Onsite Emergency Plan and Duke Power Company Crisis Management Plan (Response at p. 35).

Conference)", 15 NRC 566, at 570, 575 (1982). In light of the fact that documents describing precisely Applicants' system to provide information to decisionmakers in the event of an emergency at Catawba has been available to Intervenorrs for almost one year, the deficiencies in this contention are readily apparent.<sup>9</sup>

For the reasons set forth above, this contention should be rejected.

C. Contention EP3

The emergency plans do not provide for adequate emergency facilities and equipment to support the emergency response as required by 10 CFR 50.47(b)(8) in that:

a) the plans do not provide for sufficient uncontaminated food, clothing, and bedding for persons who are evacuated. The plan does not attempt to estimate these needs nor provide specific information on how they are to be met.

b) the plans do not demonstrate the unlikely proposition that just 14 reception center/shelters are adequate to register and process some 75,000 evacuees. Indeed, the Catawba Nuclear Station Site Specific Plan (Part 4, SCORERP) provides that "all evacuees, both those ordered and those spontaneous, will be processed through their respective reception centers" (p. B-2). With no clear plan for

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<sup>9</sup> For example, despite having access to the relevant information for months, Intervenorrs continue to mischaracterize Applicants' system for providing information to decisionmakers in an emergency situation as consisting of TLD's and "mobile teams." To the contrary, as is made clear in both the Onsite Plan and the Crisis Management Plan, Applicants' system consists of an array of in-plant equipment to project plume path and dose exposures, in addition to Field Monitoring Teams. See "Argument and Documentation in Support of Motion For Summary Dispositon on Contention 27," July 11, 1983.

controlling entry and exit from the reception centers, and no restrictions on who may enter, it is very likely that reception centers will become overcrowded. Persons from outside the evacuation area will be understandably concerned about whether or not they have been exposed to radiation and might well proceed to a nearby reception center -- exacerbating problems of crowding that already loom as serious given the enormity of the task of processing EPZ evacuees at reception centers with limited space and supplies.

Applicants oppose this contention which alleges that adequate emergency facilities and equipment are lacking. The contention is premised specifically upon the requirement of 10 C.F.R. §50.47(b)(8). An examination of the regulation in conjunction with the substance of the contention reflects that the regulation is totally unrelated to the examples set forth in the contention. To explain, the regulation speaks to emergency onsite facilities. This point is made clear in a review of the guidance in NUREG-0654, Section H. The contentions, on the other hand, do not address emergency onsite facilities; rather, they speak to offsite reception centers and shelters. Accordingly, the contention is defective and should be dismissed.

With respect to the substance of the contention, Applicants maintain that provision for food, clothing, etc. has been discussed in the various emergency plans. See North Carolina Plan Part 1 at p. 24, Part 2 at pp. 7 and 32 and Part 3 at pp. 33-34; South Carolina Operational

Radiological Emergency Response Plan (SCORERP) at p. 17; South Carolina Catawba Site Specific Plan Appendix B; York County Plan Appendix K. In essence these plans contemplate that organizations such as the American Red Cross, the Salvation Army, and a number of state and local organizations will provide adequate food, clothing, etc. so as to assure that the evacuees will be properly cared for. Given the nature of emergency plans, this is all that is necessary. In the absence of some particular allegation (accompanied by the requisite specificity and basis) that the American Red Cross, for instance, will be unable to fulfill its obligation to provide such services, this contention must be denied as lacking basis.

With respect to the adequacy of the number of reception centers/shelters, provision is made to eliminate any overcrowding. Specifically, additional reception centers/shelters can be opened (Applicant's Brochure at p. 13) and space requirements can be reduced so as to accommodate more people while maintaining acceptable conditions. North Carolina Plan Part 2 at p. 32 and Part 3 at p. 34. Absent a specific allegation as to why these measures will not prevent overcrowding the contention should be denied for failure to set forth an adequate basis.



It should be emphasized that the subject matter of this contention does not raise a public health and safety concern; rather it speaks to matters of inconvenience. Cf. Southern California Edison Co., et al. (San Onofre Nuclear Generating Station, Units 2 & 3), LBP-82-39, 15 NRC 1163, 1283 (1982). Applicants maintain that matters of inconvenience should not be the subject of this proceeding.

D. Contention EP4

Intervenors are informed that monitoring equipment used to assess exposure levels of the evacuated population is antiquated and inadequate. 10 CFR 50.47(b)(9) requires adequate equipment for assessing and monitoring offsite consequences of a radiological emergency.

Applicants oppose admission of this contention because it is untimely and lacks specificity and bases.

With respect to specificity and bases, Applicants would note that the contention is not particularly clear. It appears that Intervenors are attempting to raise an issue with respect to whether equipment "to assess exposure levels of the evacuated population" is in compliance with 10 C.F.R. 50.47(b)(9). That regulatory provision requires that

Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency [be] in use.

Such standard is incorporated into Part II, Section I of NUREG-0654 which lists the evaluation criteria to determine compliance with the planning standard. The relevant evaluation criteria are 7, 8, 9 and 10. These criteria describe monitoring equipment which will be capable of assessing "exposure levels of the evacuated population."

Each of these criteria is addressed in detail in the various plans, and, where applicable, the Plans describe the equipment used to "assess exposure levels of the evacuated population." For example, Applicants' compliance with 10 C.F.R. Section 50.47(b)(9) is contained in the Catawba Onsite Emergency Plan at Section I. This submittal has been reviewed and approved by the NRC Staff in Supplement 1 to its SER at Section 13.3.1.9.<sup>10</sup>

Compliance with the enumerated criteria is described in the North Carolina State Plan Part 1 at pp. 48-52, Part 2 at p. 25, and Part 3 at p. 26. Instrumentation to be used to assess exposure levels is identified in all three parts of the North Carolina Plans. (See particularly Attachment 3 to Part 1.) Moreover, it is clearly stated in Part 1 of the North Carolina State Plan that the

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<sup>10</sup> The only item left for resolution is one in which Applicants must develop procedures to convert measurements to dose rates. Such has nothing to do with the "monitoring equipment" which is the subject of this contention.

described equipment will be "inventoried, inspected and given an operational check quarterly" to assure that it is capable of performing its function. Id. at p. 84.

The South Carolina Plan discusses compliance with these criteria at pp. 25-27 of the South Carolina Operational Radiological Emergency Response Plan (SCORERP), in Appendices II and IV of the South Carolina Technical Radiological Emergency Response Plan (SCTERP) and at pp. Q-28-Q-32 of the York County Emergency Operation Plan. Instrumentation to be used to assess exposure levels is identified in SCORERP and SCTERP in the sections listed above.

In light of the foregoing, it cannot plausibly suffice for Intervenor simply to maintain they are "informed" that some unspecified equipment is "antiquated and inadequate." Certainly, Intervenor should be required to specify at a minimum which specific equipment (belonging to whom) they believe is defective. Moreover, Intervenor should specify precisely how, and why, they believe such equipment is defective. Indeed, experience with these Intervenor over the last two years demonstrates that such a vague and formless contention cannot be admitted.<sup>11</sup>

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<sup>11</sup> Applicants have had difficulty in understanding this proposed contention. It could be read that Intervenor are questioning the equipment to be used at reception centers/shelters to determine levels of contamination. If so, this equipment is described in  
(footnote continued)

In addition, the contention is untimely. Surely it was not necessary for Intervenor to have to review the specific emergency plans to raise this issue. In the absence of an affirmative showing by Intervenor that their "information" as to "antiquated and inadequate" monitoring came to them late, this contention must be rejected as untimely.

E. Contention EP5

The plans for recovery and re-entry into the affected area are inadequate and incomplete in that:

a) There are no adequate provisions for who will pay and maintain decontamination crews.

b) There are no adequate provisions for the availability of sufficient lead containers to enable the storage of contaminated bedding, clothing and wastes without hazard from gamma emitters to personnel and the public.

c) There are no adequate provisions for dealing with contaminated wildlife and offsite domestic animals.

d) There are no adequate provisions that can assure the decontamination of sufficient safe drinking water.

e) The provisions relating to the removal of dead bodies and animal carcasses in the case of a serious accident are inadequate. They merely delegate the responsibility to the Coroner.

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(footnote continued from previous page)  
the sections referenced in the text. Intervenor's failure to provide any basis or specificity with regard to this allegation renders the contention defective for the same reasons set forth in the text

Applicants oppose the admission of this contention which alleges that specific items have not been addressed in offsite recovery plans. Intervenors advance extremely narrow topic areas such as who will pay for decontamination crews and how will animal carcasses be removed. Applicants submit that the level of detail sought by Intervenors is contrary to the nature of recovery and reentry plans, which must remain flexible. Support for this position is found in 10 C.F.R. 50.47(b)(13) which provides that only general plans for recovery and reentry are to be developed. See also 10 C.F.R. Part 50, Appendix E, IV. H and the evaluation criteria of NUREG-0654, Section II which provides in pertinent part that

Each organization, as appropriate, shall develop general plans and procedures for reentry and recovery and describe the means by which decisions to relax protective measures (e.g., allow reentry into an evacuated area) are reached. This process should consider both existing and potential conditions.

See also San Onofre, supra, 15 NRC at 1282.

Accordingly, inquiry into this area is confined to whether general plans for recovery and reentry have been provided. In this regard see SCORERP Appendix VIII; SCORERP, pp. 31-32; York County p. Q-34 North Carolina Plan Part 1, pp. 74-75, Part 2, pp. 36-37 and Part 3, pp. 37-38. This information sets forth the general plans and



criteria for reentry and recovery and describes the means by which decisions to relax protective measures are reached. As such, compliance with the applicable regulation and regulatory guidance is demonstrated and thus there is no basis for the allegation that inadequate recovery and reentry plans exist.

Intervenors do not allege that the information contained in the above cited sections fails to satisfy the requirements for a general plan. That Intervenors seek more is inconsistent with the regulatory framework. Accordingly, the contention should be denied.

F. Contention EP6

The emergency plans do not provide reasonable assurance that adequate protective measures can and will be taken [10 CFR 50.47(a)(1)] in that:

a) There are no adequate provisions to prevent runoff from contaminated areas to non-contaminated areas downstream.

b) There are no adequate provisions for preventing contaminated wildlife from migrating to non-contaminated areas.

c) There are no adequate provisions for preventing contaminated persons from entering a non-contaminated zone. The plans do not make clear whether or not registration at a reception center/shelter is mandatory or not; if mandatory, by what procedures will it be enforced and what effort will these procedures have on evacuation times and traffic flow?

Applicants oppose the admission of this contention particularly since it is difficult to ascertain what Intervenors seek to raise. It appears that Intervenors

question the ability to isolate contamination to within the plume exposure EPZ and thereby take issue with protective actions for the ingestion exposure pathway EPZ.<sup>12</sup> 10 C.F.R. 50.47(b)(10) requires that protective actions for the ingestion exposure pathway EPZ be developed. NUREG-0654, Sec. J.11 sets forth the applicable evaluation criteria. Each of the subject state emergency plans address these criteria, including monitoring of water supplies and wildlife. See North Carolina Plan Part 1, pp. 64-69; SCORERP, pp. 28-31. See also York County Plan, Sec. Q, pp. 30-32. Accordingly, there is no basis for Intervenor's contention.

Applicants would note that, like Contention 5, Intervenor's are attempting to require specific detailed information as to how , e.g., contaminated wildlife will

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<sup>12</sup> Intervenor's reference to contaminated persons entering a non-contaminated zone does not appear to be related to the other two items set forth in the contention. Rather, this aspect of the contention assumes that people leaving the plume exposure EPZ will not go to reception centers/shelters. 10 C.F.R. 50.47(a)(1) requires a finding of reasonable assurance. Applicants' brochure (p. 10) instructs subject individuals that under evacuation conditions, they should first go to a reception center/shelter. See also North Carolina Plan Part 1, pp. 53-56 and SCORERP, Appendix I to Annex C, pp. C-8 thru C-13 which describes public education efforts. Given this information, it is reasonable to conclude that affected individuals will go to the appropriate reception center/shelter. To advance a proper contention it is incumbent upon Intervenor's to show why public education efforts of Applicants and the states will be ineffective. This they have failed to do and thus this aspect of the contention should be denied.

be contained. Applicants maintain that specific detailed information of this nature is unnecessary and will not prevent a finding of reasonable assurance that protective measures can be taken. See 10 C.F.R. 50.47(a)(1). Absent Intervenor's challenge to the information contained in the referenced sections, the contention should be denied..

G. Contention EP7

In the case of a severe accident, such as a pressure vessel rupture, advance warning would not be possible and evacuation would not be an appropriate response. The only protection provision for such an occurrence is sheltering -- staying indoors. The plans do not adequately address the effectiveness of sheltering as a response, nor do they provide for alternative solutions. The plans and public brochure of the Applicants and relevant state and local authorities evidence an inability to adequately plan for the worst possible case and hence fail to provide a reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency as required by 10 CFR 50.47(a)(1).

Applicants oppose Intervenor's sheltering contention which can be essentially broken down into three parts:

(1) that in a severe accident advance warning would not be possible; (2) that sheltering under such a circumstance has not been adequately shown to be effective; and (3) present emergency plans fail to specifically address protective actions in such a severe accident. Each point is addressed below.

With respect to the advance warning issue, Intervenor's are simply wrong. The Commission's Statement of Consideration accompanying the emergency plan rule specifies that the 15 minute notification period was selected so that notification could be effected in severe unexpected accident situations. See 45 Fed. Reg. 55402, 55407 (August 19, 1980). Applicants have installed a system which will provide such warning. Accordingly, there is no basis for this aspect of Intervenor's allegation.

With respect to the effectiveness of sheltering as a response, the Commission in the above referenced Statement of Consideration recognized that "protective actions under a severe accident . . . could include staying indoors in the case of a release that has already occurred. . . ." 45 Fed. Reg. at 55407. Furthermore, NUREG-0654, Section J(10)(m), referencing three reports, recognizes that recommended protective actions could include sheltering. An examination of the referenced documents reflects the adequacy of sheltering. Accordingly, there is no basis for Intervenor's assertion of the inadequacy of sheltering. Even if a basis were to exist, this aspect of the contention must still be denied because Intervenor's have failed to provide any specificity whatsoever which could demonstrate the error of the Staff's position. Furthermore, Applicants submit that this aspect of the

contention is untimely. The Commission's recognition of sheltering, as well as NUREG-0654 and its position that sheltering is satisfactory, have been both long standing. Intervenor's have been on notice since 1980 that sheltering could indeed be considered. If sheltering were a concern, it should have been raised at the initial filing of contentions.

With respect to Applicants' and States' alleged deficient reference to sheltering, again Intervenor's position is without basis. Applicants' brochure, which was provided to the Board and parties, specifically states in bold lettering at page 9 that persons should not evacuate unless an order is given. Further instruction is given with respect to actions to be taken if one were to stay indoors. The North Carolina State Plan at Part 1, page 57 recognizes that protective actions may include "advising people to stay indoors." The Gaston County, North Carolina emergency plan provides similar information. See Part 2, page 29. The Mecklenburg County, North Carolina emergency plan also contains similar information. See Part 3 at page 31. The South Carolina State Plan (SCORERP) addresses sheltering at page C-17. The Catawba Site Specific Plan incorporates the general South Carolina plan in this regard at page A-3.



In sum, it cannot be said that Applicants, States and Counties have failed to address sheltering. Thus, there is no basis for the contention.

H. Contention EP8

There is no reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency in that the emergency plans of Applicants, the States of North Carolina and South Carolina, and the Counties of Mecklenburg, Gaston and York fail to assign clear and effective primary responsibilities for emergency response and fail to establish specific responsibilities of the various supporting organizations. Conflict, confusion and lack of coordination are likely to prevail. Conditions may be the worst during the 7 to 9 hours after notification of state authorities of the existence of an accident at the Catawba Station while the North Carolina State Emergency Response Team (SERT) assembles and travels from Raleigh to the South Carolina Forward Emergency Operations Center (FEOC), located dangerously within the 10 miles EPZ at Clover, South Carolina.

The FEOC itself would require at least three and one-half hours to be assembled and staffed from Columbia, South Carolina. While the formal authority to order evacuation of the plume exposure pathway EPZ straddling the North Carolina-South Carolina border rests with the respective state governors, a confusing and ineffective array of consultative and delegative authority appears to cloud the lines of primary responsibility. The residual responsibilities of the respective County governments, agencies and the support organizations are either unspecified or inadequate to the task of effective protective response.

Applicants oppose the admission of this contention on the grounds that it lacks specificity and basis.

Intervenors contend the emergency plans are inadequate

because there is a lack of coordination among the various jurisdictions responsible for actions in the event of an emergency. The plans clearly address organizational responsibilities from the initiation of an emergency to close-out. SCORERP p. 1; South Carolina Catawba Site Specific Plan; York County Plan, p. vii, pp. 2-3, 7-11, Q10-Q42, Q54-Q56; North Carolina Plan Part 1, pp. 10-36 and Attachment 1; Part 2, pp. 3-18 and Attachment 1; Part 3, pp. 3-16 and Attachment 1. Intervenors have narrowed the focus of this broad brush contention to essentially two issues: (1) the exercise of authority while State officials are assembling and in route to the area and (2) the exercise of authority to order an evacuation. Neither of these issues satisfies the contention requirements of the Commission; rather, they are clear examples of vague, non-specific allegations.

With respect to the first issue, the York County Plan specifies that until state officials are established at the Forward Emergency Operations Center, York County maintains responsibility for implementation of protective actions. See York County Plan, pp. Q9-Q14. The same situation applies to Gaston and Mecklenburg Counties, North Carolina. See North Carolina Plan Part 2, pp. 1-2; Part 3, pp. 1-2. Intervenors have ignored this

information.<sup>13</sup> Absent any supportable allegation regarding these plans, this aspect of the contention must be denied.

With respect to the second issue, the authority to order an evacuation is clear. North Carolina Plan Part 1, p. 3, Part 2, pp. 1-2, Part 3, 1-2; South Carolina Catawba Site Specific Plan, p. 12; York County Plan, p. Q-9. Again, Intervenorors fail to address this information; they provide no specificity for their allegation. As such, this aspect of the contention also fails to comport with the Commission's requirements and should be denied.

I. Contention EP9

The plans do not adequately provide for the early notification and clear instruction to state and local response organizations and the public that are required by 10 CFR 50.47(b)(5) in that:

a) There is little reason to believe that the fixed siren system installed within the EPZ for alerting the populace will operate as assumed. First, there is some question as to whether or not the sirens will operate properly in an emergency. Also, the back-up systems consist of "fixed and mobile sirens, law enforcement sound equipment mounted on vehicles, boats and aircraft and door-to-door notification" (Catawba Nuclear Station Site Specific Part 4 SCORERP Annex, p. A-1) -- systems which

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<sup>13</sup> Intervenorors attempt to overcome the above-referenced deficiency by stating the "responsibilities of the respective County governments...are...inadequate." No specificity whatsoever is provided. Accordingly, this allegation cannot be found to be in compliance with the Commission's pleading requirements of 10 CFR §2.714.

would involve a significant drain on law enforcement resources needed to implement evacuation procedures.

Secondly, if the sirens do sound, not all citizens who would be affected and therefore require notification would be able to hear a warning siren. Such a situation could arise as a result of hearing impairments, weather conditions, distance from sirens, etc.

Finally, the inadequacies of the public information (both in terms of content and distribution) make it likely that many residents will not respond to the sirens.

b) In the event of an emergency, citizens uncertain as to how to respond would likely not know who to contact for clarification and instructions.

c) In the event of a power outage the public's access (and possibly the access of state and local authorities with emergency responsibilities) to emergency broadcast information could be seriously impaired. [Without a specific, reasonable plan to deal with such a contingency, the emergency plans do not meet 10 CFR 50.47(b)(6) as well as (b)(5).]

d) There are inadequate provisions for notification of special facilities such as hospitals, prisons, recreation areas, schools, etc. For example, neither the Carowinds Theme Park nor the Heritage U.S.A. religious retreat appear to have any notification plans or procedures. A conservative estimate of a peak summer crowd at Carowinds is 30,000 to 35,000 people.

For such a crowd to be notified and given instructions on how to leave the park in a quick, orderly, and safe manner clearly requires some set of special procedures that is yet to be formulated.

e) The plan does not provide for the availability of a trained, independent, objective person or agency to assess a situation and determine when notification of the public

and state and local authorities of an emergency or unusual event is necessary. Plans that leave the regulated industry free to define what is and what is not an emergency are fundamentally unsound.

Applicants do not oppose the admission of this contention with the exception of those matters discussed below.

In Applicants' view, part (a) as it relates to the operability of sirens is untimely. Information pertaining to the fixed siren system is contained in the Crisis Management Plan Appendix 3. As previously noted, this document has been available to Intervenors for about one year. Absent compliance with the late-filed contention criteria of 10 CFR §2.714 which showing has not been made, this aspect of the contention must be denied.

Applicants also assert that the last paragraph of (a) and all of (b) should be rejected because they lack specificity and bases. In Applicants' view, the concern expressed is whether or not Applicants' Emergency Plan Brochure will be effective in instructing citizens how to response to an emergency and who to contact if an emergency were to occur. This issue is more properly a part of proposed Contention 1.

The Emergency Plan Brochure prepared by Applicants contains information with respect to responding to emergencies, as well as telephone numbers of the appropriate local agencies. (Brochure, pp. 7-11.) Given



this fact, Intervenor's flat assertion that citizens would be "uncertain as to how to respond" and would "likely" not know who to contact is groundless.

Applicants also oppose subsection (e). This aspect of the contention seeks to have an independent entity determine when state and local authorities, as well as the public, should be notified in an emergency. This position is an attack on the Commission's regulations and must be dismissed. 10 C.F.R. 50.47(b)(4) provides that "state and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite measures." Appendix E, Section B of Part 50 requires prospective licensees to describe "the means to be used in determining the magnitude of and continually assessing the impact of the release of radioactive materials." This section recognizes that licensees will provide such information to local and state agencies. The implementation guidance is contained in NUREG-0654, Section D.4 states that

Each State and local organization should have procedures in place that provide for emergency actions to be taken which are consistent with the emergency actions recommended by the nuclear facility licensee, taking into account local offsite conditions that exist at the time of the emergency.

Given the clear language of the regulations, Intervenor's position must be viewed as an attack thereon and thus impermissible for litigation in this proceeding. Intervenor has failed to provide any specificity which would call the requirements into question.

Applicants note that this aspect of the contention is based in part upon an improper premise, viz., that Applicants control the notification of the public. This is not the case. See, Crisis Management Plan, Parts A.1.b and B.4. Rather, as set forth in the respective State and County plans, it is those entities that alert and notify the public. See North Carolina Plan Part 1, pp. 46-47, and pp. 53-55; Part 2, pp. 19-28, Part 3, pp. 17-25, and pp. 27-29; South Carolina Catawba Site Specific Plan p. A-2; SCORERP Appendix 3 to Annex C; York County Plan, Annex D, and also pp. C-2 thru C-4, C-13 thru C-15, and Q-57 thru Q-65.

Furthermore, this contention is untimely. To explain, the regulations and regulatory guidance, as well as the preexisting North Carolina and South Carolina State plans, recognize that licensees are responsible for ascertaining the existence of an emergency (10 CFR §50.47(b)(4); NUREG-0654, Section D.1; North Carolina Plan Part 1, pp. 36-45; SCORERP Table 4); for initially notifying state and local emergency response organizations

(10 CFR §50.47(b)(5); Appendix E to Part 50, D.1 and D.3; NUREG-0654, D.3; North Carolina Plan Part 1, pp. 46 48 SCORERP Table 4); and for making recommendations as to protective actions (10 CFR §50.47(b)(10); NUREG-0654 Section J.7; North Carolina Plan Part 2, p. 20; SCORERP Table 4). Given the long standing nature of the role that licensees play in emergency situations, Intervenors, if they were truly troubled by this requirement, could and should have raised this matter when they filed their initial contentions. Their failure to do so is yet another reason to dismiss this contention.

J. Contention EP10

The proposed emergency plans fail to provide a reasonable assurance that the public health and safety will be protected because the responsibility for notification of the public and state and local authorities lies with the Applicant.

Given Duke Power Company's track record of being slow to meet its obligation of informing the public, the NRC and state and local authorities of radiological releases to the environment (for example the 1977 Oconee incidents) and the predictable reluctance of any nuclear plant operator to resort to evacuation procedures, the proposed plans do not adequately assure that the public will be notified of an emergency in a timely manner. Since the writings of James Madison, it has been recognized that power must be wielded only where countervailing powers exist. Even if Duke Power Company's record were spotless a policy that relied on trust would be unwise and insufficient to provide reasonable assurance of timely notification. It is vital that an independent alert and notification process be established. Such a process could employ real-time monitors that could provide direct emergency information to responsible

state and local authorities who, in consultation with Duke Power Company, would make appropriate notification decisions.

Applicants read this contention as an extension of Contention 9(e). For the reasons set forth in the discussion concerning Contention 9(e), Contention 10 should be denied.<sup>14</sup>

K. Contention EP11

Effective emergency planning should be required for the City of Charlotte, North Carolina in the event of a radiological emergency at the Catawba Nuclear Station with the full range of protective actions considered including evacuation of the City's population.

Through the process of annexation Charlotte continues to grow rapidly in the direction of the Catawba station, and it will likely encroach on the 10 mile EPZ in the near future. At present the City's nearest boundary is only 10.5 miles from the facility and appears to be directly adjacent to the Applicant's proposed EPZ. Prevailing southwesterly winds make center city Charlotte the most likely target for an airborne release of radioactivity from the plant. See, Catawba Nuclear Station Site Specific, Part 4, SCORERP, p. 2.

In the event of an evacuation of the 10 mile EPZ around Catawba many thousands of people would flow through downtown Charlotte because planned evacuation routes lead through the city; because many EPZ evacuees "assigned" to other routes would choose these same routes since they are "evacuation travelsheds," i.e., the fastest

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<sup>14</sup> As for Intervenor's allegation of Duke Power Company's track record, it should be recognized that Intervenor's go on to state that even if Duke Power Company's record was spotless, they would still advance the same contention. Therefore, the track record cannot be viewed as support. In any event, Duke's track record was the subject of Palmetto Alliance Contention 7 which was dismissed by the Board in its Memorandum and Order of June 20, 1983 at pp. 10-12.

means of exit from the EPZ. See, Voorhees, Catawba Nuclear Station Evacuation Analysis; and, finally, because many additional "volunteers" will choose to join their neighbors in fleeing the vicinity of the Catawba plant. Prudence and effective protective action for those living near Catawba require emergency planning for the City of Charlotte.

Applicants oppose the admission of this contention which alleges that the city of Charlotte, North Carolina should be included in the 10 mile EPZ. This is not the first occasion in which CESG has sought to litigate this issue. By petition dated January 28, 1979, it raised the precise issue for both Duke Power Company's Catawba Nuclear Station and McGuire Nuclear Station. The Director of the Office of Nuclear Reactor Regulation, in a decision of January 9, 1981 (13 NRC 45), specifically found "that the population data for the Catawba site do not reflect a sufficient unique circumstance to warrant considerations of Class 9 accident consequences at this time." at p. 60. Similarly, on the McGuire docket the Licensing Board found

In CESG's view, the McGuire facility's proximity to the high population center of Charlotte, North Carolina warrants a finding by this Board that this case presents "special circumstances." However, the Director's Decision in the Catawba case, supra note 15, provides a clear, unequivocal response: the mere fact that a large city is located nearby does not constitute "special circumstances." Indeed, Catawba addressed the very issue raised by CESG in the immediate proceeding when the Director held that the location of Charlotte, North Carolina 17 miles from the Catawba facility did not constitute "special circumstances." CESG has



made no assertions regarding the population density for the McGuire site. [Memorandum and Order, February 13, 1981 at p. 13].

Applicants submit that these decisions have a binding effect on this contention and warrant its denial.

However, so as to dispel any notion that the proximity of the city of Charlotte is a circumstance which warrants Charlotte's consideration in offsite emergency plans the following discussion is presented.<sup>15</sup>

Commission regulations regarding emergency planning (e.g., Appendix E to 10 C.F.R. Part 50 and 10 C.F.R. §50.47 (45 Fed. Reg. 55402 (August 19, 1980))) clearly establish emergency planning zones (EPZs) out to a distance of 50 miles around a nuclear power plant, viz.,  
(1) an approximately 10 mile radius plume exposure pathway EPZ for airborne exposure to radioactive materials, and  
(2) an approximately 50 mile radius ingestion pathway EPZ

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<sup>15</sup> Applicants are aware of the Licensing Board's Chairman's dicta in San Onofre wherein he stated that in special circumstances areas out to 20 miles might be considered as part of the plume exposure EPZ. See Southern California Edison Company, et al. (San Onofre Generating Station, Units 2 & 3), LBP-82-39, 15 NRC 1163, 1181 n. 14 (1982). Applicants acknowledge, that if special circumstances exist, areas beyond 10 miles can indeed be included in the plume exposure EPZ. However, as will be shown (1) Intervenors have made no such demonstration as specifically required and (2) an examination of existing facts fails to warrant a determination that special circumstances exist. It should be noted that Applicants in their original pleading of December 30, 1981 advised Intervenors, in response to a similar contention, that the Commission's rules required them to make an affirmative showing of special circumstances.

for contamination of food and water. In each of these EPZs, Commission regulations require specific actions to protect the public health and safety in the unlikely event of an accident. Thus, to the extent that Intervenor's seek to enlarge the 10 mile EPZ set forth in such regulations, their proposed contention is clearly an impermissible attack upon such regulations and their bases. 10 C.F.R. §2.758. It does not suffice for Intervenor's vaguely to suggest special circumstances. Rather, 10 C.F.R. §2.758(b) specifically requires

an affidavit that identifies the specific aspect or aspects of the subject matter of the proceedings as to which application of the rule or regulation (or provision thereof) would not serve the purposes for which the rule or regulation was adopted, and shall set forth with particularity the special circumstances alleged to justify the waiver or exception requested.

Intervenor's have totally failed to comply with the Commission's requirements as to its showing of special circumstances and thus, this contention should be denied. In any event, an examination of the special circumstance allegations, i.e., the proximity of Charlotte and the prevailing winds, are not matters which warrant special consideration. To explain, atmospheric conditions, such as wind direction and inversion, were clearly considered by the NRC in developing the 10-mile EPZ concept. The joint NRC/EPA Task Force which recommended a 10-mile EPZ stated: "The EPZ recommended is of sufficient size [a

10-mile radius] to provide dose savings to the population in areas where the projected dose from design basis accidents could be expected to exceed the applicable PAGs under unfavorable atmospheric conditions." (emphasis added). NUREG-0396, p. at 16. The Task Force concluded that:

[S]ignificant plume travel times are associated with the most adverse meteorological conditions that might result in large potential exposures far from the site. For example, under poor dispersion conditions associated with low windspeeds, two hours or more might be required for the plume to travel a distance of five miles. Higher windspeeds would result in shorter travel times but would provide more dispersion, making high exposures at long distances much less likely. [Id. at 18]. Meteorological considerations are the subject of an extensive, technical discussion in Appendix I to NUREG-0396. Id. at I-20 to I-26. In view of the NRC's previous, extensive consideration of possible adverse atmospheric conditions in selecting the 10-mile EPZ, such conditions are not special circumstances warranting further consideration in this proceeding.

In any event, the record reflects that the wind conditions which would impact Charlotte, a Southwesterly wind, occurs no more than 10% of the time. FSAR Table 2.3.7-4. Such is not a special circumstance.

With regard to Catawba's proximity to Charlotte, the NRC has provided guidance in this matter. In a decision of June 19, 1980, the Director of the Office of Nuclear

With regard to Catawba's proximity to Charlotte, the NRC has provided guidance in this matter. In a decision of June 19, 1980, the Director of the Office of Nuclear Reactor Regulation characterized special circumstances regarding high population density as being "above the trip points in the Standard Review Plan (NUREG-74-087, September 1975) and Regulation Guide, 4.7, General Site Suitability Criteria for Nuclear Power Stations (November 1974)." Arizona Public Service Company (Palo Verde Nuclear Generating Station, Units 1, 2 and 3) et al., DD-80-22, 11 NRC 919, 924 (1980). The referenced Standard Review Plan and Regulatory Guide set the "trip points" as being "at the time of initial operation," "500 persons per square mile averaged over any radial distance out to 30 miles (cumulative population at a distance divided by the area at that distance)," or "over the lifetime of the facility" as being 1000 persons per square mile. The record reflects that at the measured boundaries Catawba satisfies this criterion. See the Director's decision 13 NRC at p. 59. Accordingly, special circumstances do not exist with respect to this matter.

L. Contention EPl

Applicants have not provided reasonable assurance that adequate protective measures can and will be taken by state, local and utility emergency preparedness officials and other entities and persons, such as medical facilities, fire fighting and law enforcement organizations and social service agencies, in the

from the plant and had a 1975 population of 35,346. Nearby Charlotte, North Carolina, had a population of 281,417 within the city and lies only 10.5 miles from the plant. The Charlotte-Gastonia SMSA had a 1975 population of 592,706, the bulk of which lies within 20 miles of the plant, FSAR, 2.1-1, Table 2.1.3-2. U.S. Department of Commerce, Bureau of the Census, County and City Data Book 1977: A Statistical Abstract Supplement, (Washington, GPO, 1978), pp. 548, 720 and 744. Recreational use of Lake Wylie, adjacent to the facility and Carowinds amusement park, 8 miles from the plant, and religious gatherings at Heritage, USA, facilities of the PTL Club, and other nearby activities introduce transient populations in excess of 60,000 on a peak day. FSAR, Tables 2.13-17 and 2.13-19, p. 2.1-3. Applicants are apparently unaware of the Heritage, USA, facilities. Neither state nor local emergency preparedness plans have been developed with respect to the plant to protect people living within either the plume exposure or ingestion pathway EPZs. Although Applicants may anticipate the preparation and development of plans meeting the paper requirements of NUREG 0654, Rev. 1, "a good, well written plan is an important step toward achieving a preparedness capability, but it is only that." FEMA, Report to the President: State Radiological Emergency Planning and Preparedness in Support of Commercial Nuclear Power Plants (June 1980), p. VI-2. Applicants have no intention of conducting the "full-scale exercise," called for by 10 CFR Part 50, App. E(f)(1), but only well-rehearsed drills involving no significant movements of population.

Applicants oppose the admission of this contention on the grounds that (1) it lacks specificity and bases; (2) it seeks to raise issues which are raised in a more precise fashion in other proposed contentions; and (3) in several ways the contention constitutes a direct attack on the Commission's Emergency Planning Regulations.



precise fashion in other proposed contentions; and (3) in several ways the contention constitutes a direct attack on the Commission's Emergency Planning Regulations.

Before Applicants discuss their response to this contention in any detail, however, a few words as to the behavior of Palmetto Alliance and CESG with respect to this contention are in order. This contention is identical to the proposed Contention 4 filed by Palmetto Alliance in December of 1981. This Board then characterized this contention as "broadly-worded," "by necessity . . . based on little more than imagination;" criticized Applicants for taking the position that Palmetto Alliance should have been able to draft a more specific contention at that time; and held that Palmetto Alliance would not have to file specific contentions on emergency plans until such time as it had an opportunity to scrutinize the state and local emergency plans for the Catawba facility. Duke Power Co., et al. (Catawba Nuclear Station, Units 1 and 2) "Memorandum and Order (Reflecting Decisions Made Following Prehearing Conference), 15 NRC 566, 572-573 (1982). Now, having had ample opportunity to examine the emergency plans in detail, Palmetto Alliance and CESG resubmit the original contention. This is simply

one more example of Intervenor's irresponsible behavior in this proceeding. For this reason alone this contention should be rejected out of hand.

However, there are other reasons for rejecting this contention. The first is that it wholly lacks specificity and bases. Though this contention is not framed in an articulate fashion it appears to Applicants that Intervenor's are attempting to raise two concerns.

First, Intervenor's contend that Applicants have not provided reasonable assurance that in the event of an emergency adequate protective measures can be taken by certain entities as required by 10 CFR 50.47. Appendix E to 10 CFR Part 50, and the specific criteria set forth in NUREG-0654, Rev. 1. As the bases for this assertion, Intervenor's note that Rock Hill, Gastonia Charlotte, Lake Wylie, Carowinds, and Heritage USA exist, then allege that "neither state nor local emergency preparedness plans have been developed with respect to the plant to protect people living within either in the plant exposure or ingestion pathway EPZ."

Second, Intervenor's acknowledge that a plan will be prepared which meets the requirements of NUREG-0654. However, Intervenor's contend that such a plan will be insufficient, apparently because "Applicants have no intention of conducting the 'full-scale exercise' called

for by 10 C.F.R. Part 50, App. E(f)(1), but only well-rehearsed drills involving no significant movements of population."

Applicants object to inclusion of Intervenor's first allegation as a subject of litigation in this proceeding on the grounds that it is not sufficiently specific and lacks any bases whatsoever; moreover, the assertions made therein are in some instances barred by regulation from consideration in this proceeding. To begin, it is beyond dispute that state and local emergency plans have now been developed. These plans meet the requirements of 10 C.F.R. 50.47(b), and Appendix E to Part 50. Not only do they meet the guidance set out in NUREG-0654, but they list specifically each of the elements included therein and reference where in the plans it is addressed. In light of this, it is plainly insufficient for Intervenor to state flatly that no reasonable assurance exists because "[n]either state nor local emergency plans have been developed." Additionally, Applicants would point out that all of Rock Hill is included in the emergency plans, (Applicants Brochure, pp. 12-13), and that Lake Wylie is addressed (South Carolina Catawba Site Specific Plan, p. A-2; North Carolina Plan, p. 23), as are Carowinds and Heritage USA (York County Plan Attachment 1 to Annex Q). Because each of these elements is addressed in the

respective state and local plans, it plainly is incumbent upon Intervenor to acknowledge this fact, to specify precisely the faults it sees, and to explain why it believe such faults exist. Because Intervenor have failed to do this, the contention should be dismissed.

With respect to Charlotte and Gastonia, Applicants note that neither of these areas is within "about 10 miles" of the plant and thus are precluded by regulation from being addressed in this proceeding.<sup>16</sup> In any event, these concerns are raised in Intervenor's proposed Contention 11, and Applicants reference their response to that contention and incorporate their response by reference.<sup>17</sup>

Applicants object to the inclusion of Intervenor's second allegation as an issue for litigation in this proceeding. Intervenor make a basic error. Applicants, as well as the state and local governments, will conduct

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<sup>16</sup> State and local planners have taken local needs into account by extending the 10 mile EPZ to include all of Pineville, N.C., and York, Clover and Rock Hill, S.C., even though only a small part of each is within 10 miles.

<sup>17</sup> The discussion in Contention 11 does not reference Gastonia. However, the position set forth in response to Contention 11 applies equally to Gastonia (the city limits being 14.6 miles from the Site-FSAR Figure 2.1.3-5). Specifically, the Directors decision (13 NRC at 59) considered the 0-20 mile segment which would include Gastonia and found that the population density figures did not exceed the established "trip points" which would serve as special circumstances for considering Gastonia in the plume exposure EPZ.

achievable without mandatory public participation." 10 CFR Part 50, App. E, Subpart F.1. Palmetto Alliance has not offered any basis for its statement that Applicants "have no intention" of conducting such an exercise. Therefore this assertion is lacking in basis and should be rejected.

To the extent that Intervenor's allege the exercise should do more, such is barred by regulation. This concern is raised in proposed Contentions 14 and 15, and reference is made to Applicants' responses thereto.

For the reasons set forth above Intervenor's proposed Contention EP12 should be rejected.

M. Contention EP13

The Applicants have not provided reasonable assurances that adequate measures can be taken in the event of a radiological emergency as required by 10 CFR Section 50.47 and Appendix E, by including in the plume exposure pathway EPZ for the facility at least the communities of: Charlotte, N.C., Gastonia N.C., and all of Rock Hill, S.C. Local emergency response needs resulting from large population concentrations, the design of the facility and prevailing meteorology make a 10 mile EPZ inadequate in the event of a radiological emergency. The design of the facility is such that the planning basis which underlies the 10 mile standard is inappropriate for application to the facility. 1 NUREG 0396, Planning Basis for the Development of State and Local Government Radiological Emergency Response Plan in Support of Light Water Nuclear Power Plants, (December 1978); NUREG CR 1659, Supra.



Applicants oppose admission of this contention as an issue in this proceeding because it lacks specificity and bases, and in several respects attacks directly the Commission's regulations. At the outset, Applicants would note that proposed Contention 13 is identical to Palmetto Alliance's proposed Contention 3 (save for omission of the last sentence) filed in December, 1981. Therefore the comments made with respect to proposed Contention 12 apply.

Intervenors apparently now contend that the emergency plans are inadequate because Rock Hill, SC,<sup>18</sup> Charlotte, NC and Gastonia, NC are not included in the 10-mile EPZ.<sup>19</sup> As support for the assertion that they should be included, Intervenors make vague reference to the "design of the facility" and "prevailing meteorology," asserting that the facility's design is such that "the planning basis which underlies the 10 mile standards is inappropriate."

Applicants assume the special circumstances Intervenors attempt to raise in order to justify waiver of such regulations regarding emergency planning are (1) the ice condenser containment design of Catawba, and (2) the possibility that because of "prevailing winds," adverse

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<sup>18</sup> Rock Hill is included in the plume exposure EPZ. Applicants Brochure, pp. 12-13.

<sup>19</sup> With respect to extending the EPZ to include Charlotte and Gastonia, Applicants rely upon the discussion set forth in response to proposed Contentions 11 and 12.

meteorological conditions will spread radioactivity over the large population center outside the 10 mile EPZ. With regard to the ice condenser containment design, Commission regulations regarding emergency planning clearly contemplate all current light-water reactor design types to include the ice condenser containment used by several currently operating reactors (e.g., Donald C. Cook Nuclear Plant, Units 1 and 2; McGuire Nuclear Station, Unit 1; and Sequoyah Nuclear Station, Units 1 and 2). 45 Fed. Reg. 55402 (August 19, 1980). Thus, Applicants submit that an ice condenser containment design does not constitute a "special circumstance" that would warrant waiver of a Commission rule, and Palmetto Alliance's assertions to the contrary must fail.

In any event, Applicants would note that CESG has twice previously raised issues with respect to the ice condenser containment and has lost each time. In the referenced Director's Decision, the Director found that the Catawba ice condenser containment did not constitute a "special circumstance" (Id., 13 NRC at 53-55). In the McGuire proceeding (the McGuire containment being "virtually identical" to that of Catawba (13 NRC at 53)) CESG raised questions with respect to the ability of the

ice condenser containment to withstand a hydrogen explosion. CESG was not successful in its pursuit of this issue. LBP-81-13, 13 NRC 652 (1981).

To the extent Palmetto Alliance attempts to raise the potential consequences of severe accidents in adverse meteorological conditions and their impact on large population centers outside the 10 mile EPZ as special circumstances for waiving the provisions of the regulations regarding EPZs, such must fail. With respect to Palmetto Alliance's "prevailing winds" assertion, Applicants would point out that, though it is true that winds from the southwest are labelled as "prevailing," information shows that such winds will blow about 10% of the time. FSAR Table 2.3.7-4. In any event, as set forth more fully in the response to proposed Contention 11, Applicants submit that adverse meteorology including prevailing winds, were considered in promulgating the emergency planning regulations, and thus do not constitute "special circumstances" for waiver.

In sum, the issues raised by Intervenor's proposed Contention 13 have been previously considered in promulgating Commission regulations, and to the extent the contention questions such regulations, absent "special circumstances" not present here, the proposed contention must fail. 10 C.F.R. 2.758.

N. Contention EP14

The Applicants have failed to demonstrate their ability to take effective actions to protect the health and safety of the general public in the event of an accident in that the evacuation time study presented by the Applicants is a piece of fiction in the guise of science and may not be relied upon for determining the ability of Applicant and public authorities effectively to evacuate residents of the Catawba EPZ in a timely manner.

By overestimating the flow of traffic on evacuation routes, the Applicants' time study overestimates actual traffic movement by a factor of between three and twelve. A flow of no more than 900 vehicles/lane/hour should be assumed, according to preliminary estimates by Dr. Sheldon C. Plotkin of the Southern California Federation of Scientists.

Traffic flows are further overestimated by failing to account for voluntary evacuation likely to take place from Charlotte via I-77. All of the study's estimates are premised only on estimates of traffic flow within the EPZ. They fail to account for backups caused by extra-EPZ congestion, especially on I-77 in Charlotte.

The Applicants' evacuation time estimates erroneously assume quick response by school buses and multiple school bus trips. School buses in South Carolina are driven by high school kids. No public official would dare to send high school kids into an evacuation zone to transport those without vehicles. Time must be allotted for finding drivers.

The Applicants' study is fundamentally useless to making a determination regarding the time within which evacuation can be accomplished in that it makes numerous assumptions regarding work and living habits which are apparently made up out of whole cloth. No references or other data bases are given for the assumptions underlying these evacuation time estimates and they cannot be credited.

The evacuation time estimates should be based only upon worst case conditions, rather than best case conditions. The Applicants' study is far too optimistic in assuming that worst case conditions will require only 156% of the time of best case conditions. The judges are asked to take notice of their own experience in Applicants' counsel trying to reach York, South Carolina, in the midst of what may be a modest snowstorm to Yankee eyes, but which had plainly immobilized the entire vicinity.

Further, Applicants' study naively fails to account for parents going first to their children's schools to pick up their children before evacuating.

Moreover, Applicants' study, by slight of hand, dismisses the major impact of the presence of large transient populations at Carowinds amusement park and Heritage USA. Those populations will take longer to evacuate than the study assumes and will co-congest I-77 with resident traffic.

The fundamental test of the adequacy of an evacuation plan is whether it can be implemented in such a fashion as to effectively avoid or minimize the radiological effects of a radiation release. Absent a real life, real time evacuation drill to test the system, any study presented in support of the evacuation drill to test the system, any study presented in support of the adequacy of the emergency plans must be technically valid from a theoretical perspective and based upon assumptions having some relationship to the real world situation to which the study is supposed to apply. This study lacks either basis.

A more realistic estimate of evacuation time for the Catawba Nuclear Station in the South Carolina Piedmont is that evacuation will require a minimum of 33 hours, assuming a conservative 600 vehicles/lane/hour vehicle travel time. Applicants are, thus, unable to provide reasonable assurance of being able to avoid or meaningfully minimize radiation exposure in the event of a radiation release at Catawba.



The Applicants thus fail to meet the requirement of NUREG 0654, Rev. 1, Appendix 4, in that their evacuation time estimates may not be credited by the Commission and fail to meet Commission requirements that it be able to demonstrate the ability of local and state authorities to take effective protective actions.

Applicants do not oppose the admission of Contention 14, with the following exception. Intervenors allege that "[a]bsent a real life, real time evacuation drill" there is no assurance that the public will leave in the event of an evacuation order. As stated this aspect of the contention would require certain participation by the public in an exercise drill; this contention would require evacuation of the public during a drill. 10 C.F.R. Part 50, Appendix E §F.1 provides that the public need not participate in a drill; that mandatory public participation is not required. See Cincinnati Gas & Electric Company, et al. (Zimmer Nuclear Power Station, Unit 1), Prehearing Conference Order (Ruling on Revised Contentions Relating to Emergency Planning), December 3, 1981 at p. 13. The Commission rejected a petition for rulemaking raising this precise point. See 42 Fed. Reg. 36326 (July 14, 1977) Accordingly, this aspect of the contention should be denied.

Applicants also oppose the assertion of Intervenors (Petition, p. 17) which alleges that erroneous assumptions regarding work and living habits have been made. This

allegation is totally devoid of specificity and basis. Intervenorors have failed to set forth any of the "numerous assumptions" it relies upon, and to explain why they were improperly made. Accordingly, this aspect of the contention should be denied.

O. Contention EP15

The Applicants and the local and state Plans fail to provide adequate assurance that effective protective actions can be taken because the provisions in the several plans are inadequate with regards to transportation and related evacuatory activities in the event of an evacuation.

The emergency plans fail, fundamentally, to address the peculiar conditions of the areas surrounding the Catawba Nuclear Station. Large segments of these areas are rural. Some of the contain lower income communities. The time estimatesd used by Applicants assume that 10% of families are without vehicles. But in many of these homes, that vehicle is not home during large parts of the day. Often, those homes will have children and elderly people at home without transportation. No census of varying conditions has been done.

Moreover, the plans are premised on using school buses to transport those without their own transportation. School buses in South Carolina are driven by high school students. Even if some public official were prepared to leave emergency activities in the hands of sixteen year old youths, none would dare send such a child into an evacuation zone. No provision is made for back-up drivers. Even if the drivers can be found, in many communities those school buses are kept at the driver's home at night and not at some central motor pool.

Applicants and the local and state planning officials have failed to demonstrate that adequate transportation facilities are available to evacuate the hositals and nursing homes in the

EPZ. Nor do the plans demonstrate that adequate provisions have been made for transporting young children at day care facilities.

Numerous parents have informed members of Palmetto Alliance that in the event of an evacuation their first response will be to personally pick up their children regardless of paper plans. The state and local plans fail to address this reaction which will slow evacuation and add to confusion.

The experience at Three Mile Island demonstrates that many citizens will not leave the face of a major threat. Southerners have a special commitment to land and home which no government to date has been able to overcome. Absent a full-scale exercise which demonstrated that these hard-headed Scotch Irishmen are going to leave no assurance can be had that the public will leave in the event of an evacuation order.

The emergency plans assume, but do not demonstrate, that adequate buses are available to move school children out in a timely manner. Multiple bus pickups may be needed.

Evacuation plans which fail to assume that human beings -- and not computer modelled facsimiles thereof -- are to be evacuated cannot but fail in the test. Applicants and state and local emergency planners are unable to provide assurance that the plans can be effectively implemented to protect the residents.

Applicants do not oppose the admission of Contention 15 except that aspect which seeks that a full-scale drill include participation of the public (the third and fifth paragraphs on p. 20 of the Petition). For the reasons advanced in the discussion of Contention 14, supra, this aspect of Contention 15 should be denied.

P. Contention EP16

The provisions of medical treatment of those exposed and injured by a radiological emergency are inadequate in that:

a) The emergency plans do not demonstrate that a sufficient number of hospitals capable of handling a large influx of radiation victims are available. The Catawba Nuclear Station Site Specific Plan (Appendix 3 of Annex C) only lists the total beds of facilities "considered capable" of providing medical support. The plans do not specify how many beds these facilities have available for the radiologically contaminated. In addition, while a number of hospitals are "considered capable" of providing medical support, only one hospital -- the Divine Saviour Hospital and Nursing Home -- has actually agreed to provide treatment to the radiologically contaminated and it is located within the EPZ.

b) The plan does not take into account the fact that some of the above-mentioned hospitals "considered capable" of providing medical support will likely refuse to take radiation victims because decontamination of emergency rooms is too costly and because the plans do not insure the hospitals reimbursement for these expenses.

c) The plans do not provide adequate assurance that health personnel will agree to stay on site to treat victims. For example, at Three Mile Island the health personnel were among the first to leave.

d) The plans do not provide for sufficient change of contaminated clothing and medical supplies for health personnel.

Applicants oppose admission of this contention as an issue in this proceeding because it lacks the requisite specificity and bases, is in direct conflict with the Commission's interpretation of its own regulations, and in some respects is untimely.

Intervenors seek admission of this contention on four grounds. First, they contend that the plans are defective because they do not "demonstrate" a "sufficient" number of hospitals capable of handling "a large influx of radiation victims." Intervenors complain that the plans only provide a list of hospitals, but do not specify how many beds are available for the "radiologically contaminated." Moreover, Intervenors allege that only one hospital -- and that within the EPZ -- has agreed to provide treatment to the radiologically contaminated.

Second, Intervenors contend the plans are defective because they fail to take into account that some of the listed hospitals will not take "radiation victims" because the cost of decontamination is too high and the plans do not assure reimbursement for such expenses.

Third, Intervenors contend the plans are inadequate because there is no assurance "health personnel" will stay "on site" to treat victims. Intervenors assert "for example" that TMI "health personnel" were "among the first to leave."



Finally Intervenor contend the plans are inadequate because they do not provide for "sufficient" changes of "contaminated clothing" and medical supplies for "health personnel."

With respect to the first allegation that the plan is somehow defective because it "does not demonstrate that a sufficient number of hospitals capable of handling a large influx of radiation victims are available" Applicants would first point out that Intervenor, by apparently reading only the South Carolina Catawba Site Specific Plan, have ignored other hospitals located in the vicinity of the station which have agreed to support the station and surrounding communities in the event of an emergency. See North Carolina Plan, Part 1, at pp. 79-82.<sup>20</sup> In addition, the South Carolina Plan, while pointing out that the Divine Saviour Hospital in York is the only hospital in the area for which negotiations have at this time been completed<sup>21</sup> for providing treating to radiologically contaminated, injured individuals, notes that "[o]ther facilities are to be added pending results of

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<sup>20</sup> The North Carolina Plan lists two hospitals which will take contaminated injured individuals in the vicinity of the facility, and states that it has a list of other hospitals which will provide support.

<sup>21</sup> Applicants note that the South Carolina Catawba Site Specific Plan (at Attachment 3 to Appendix 3) reflects that agreements have been entered into with two additional hospitals.

negotiations." South Carolina Catawba Site Specific Plan, p. C-8. The Plan goes on to list an additional 32 hospitals in South Carolina which are "considered capable of providing support."

The precise nature of the requirements which must be met with respect to the listing of medical facilities to provide for "those exposed and injured by a radiological emergency" have recently been addressed by the Commission. Southern California Edison Company, et al. (San Onofre Nuclear Generating Station, Units 2 & 3), CLI-83-10, \_\_\_ NRC \_\_\_ (April 4, 1983) In San Onofre, the Commission, addressing the standard in 10 C.F.R. 50.47(b)(12), clarified the phrase "contaminated injured individuals" and the scope of "arrangement . . . for medical services" to be provided for the public in the event of a nuclear plant accident. The Commission determined that

With respect to individuals who become injured and are also contaminated, the arrangements that are currently required for onsite 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 and those local or regional facilities which have the capability to treat contaminated injured individuals should be identified. Additionally, emergency service organizations within the plume exposure pathway (EPZ) should be provided with information concerning the capability of medical facilities to handle individuals who are contaminated and injured. 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 contracts or agreements are necessary and no additional hospitals or other facilities need be constructed. [Id., slip op. at pp 2-3.]

In light of the fact that each plan complies with the standard enunciated above, Intervenor's contention must be viewed as an attack on the regulations and should be dismissed.

Intervenor's second allegation, viz., that the plan is defective because some unspecified hospitals "will likely" refuse to take "radiation victims" because the plans do not insure reimbursement for decontamination expense, lacks specificity and bases. In light of the fact that specific hospitals are identified as being willing to accept contaminated injured individuals, it plainly is not sufficient for Intervenor simply to assert that they "will likely refuse" to adhere to their agreements to treat persons who are contaminated and injured. It is incumbent on Intervenor to state specifically which hospitals will refuse to treat the affected individuals and then explain why they believe such refusal will be forthcoming. Moreover, to the extent that Intervenor seeks something beyond the already-existing agreements, they run afoul of the Commission's San Onofre decision,

which clearly states that with respect to individuals other than "contaminated injured individuals," treatment requires a "lesser degree" of advance planning, and it will be sufficient if an emergency plan identifies facilities which have the capability of providing appropriate medical treatment. CLI-83-10, slip op. at 2-3. For the reasons discussed above, this allegation should be denied.

Intervenors further contend that the plans are inadequate because they do not assure that "health personnel" will stay "on site" to treat victims. Intervenors' purported basis for this allegation is an assertion that at TMI "health personnel were among the first to leave." It is difficult to imagine an allegation more lacking in specificity and bases. For example, who are "health personnel?" Are they doctors, nurses, paramedics, ambulance attendants? What is meant by "on site?" Do Intervenors refer to the Catawba site? The EPZ? Or reception centers? Or hospitals? What do Intervenors intend with their reference to TMI? Who were the "health personnel" to whom they refer? Where were they located? What did they leave? When did they leave? What is the source of Intervenors' information in this regard? Why do they think the TMI experience to which they refer supports their allegations with respect to

Catawba? And finally, when Intervenor (assuming they can) explain this reference to TMI, then it is incumbent on them to explain why this particular allegation could not have been raised in December of 1981, when their contentions were first filed. Therefore, this allegation aside from lacking specificity and bases, is untimely as well.

In the fourth allegation, Intervenor contend the plans are deficient because they fail to provide that "health personnel" have "sufficient" changes of clothes and medical supplies. Again, in light of the fact that hospitals are identified, Intervenor's allegation lacks specificity and bases. It is incumbent on them to specify why they believe hospitals will not have sufficient "clothing" and "medical supplies" and provide a bases for their assertion.

In light of the absence of such assertion this allegation must be denied.

Q. Contention EP17

Applicants and local and state planning officials have failed to provide assurance that adequate protective actions will be taken to avoid unnecessary exposure of the population to radiation by failing to provide that radio protective drugs, specifically KI, is placed in each residence within the 10 mile EPZ, with instructions on use and purpose.



A significant effluent in a radioactive release is radioiodine. The thyroid, which takes up radioiodine, is particularly susceptible to radiation injury. Children are even more radio sensitive in that regard than adults.

Those injuries can be avoided by oral doses of KI. However, to be effective, KI must be ingested before or almost immediately after exposure.

The side effects of KI are only demonstrated to occur with long-term use.

Failure to provide KI to all residents of the EPZ is immoral. It provides an easy way to provide increased protection against a significant somatic injury at low cost. The only real argument against it is that having KI in homes will worry people. For shame.

Applicants oppose the admission of this contention on the grounds that it seeks to impose requirements that are beyond the scope of the regulation. 10 CFR §50.47(b)(10) requires that protective actions be developed. As pertinent, NUREG-0654, Section II.J.10.e and f provide:

e. Provisions for the use of radioprotective drugs, particularly for emergency workers and institutionalized persons within the plume exposure EPZ whose immediate evacuation may be infeasible or very difficult, including quantities, storage, and means of distribution.

f. State and local organizations' plans should include the method by which decisions by the State Health Department for administering radioprotective drugs to the general population are made during an emergency and the pre-determined conditions under which such drugs may be used by offsite emergency workers;

The subject emergency plans satisfy this guidance. SCORERP p 27 and p. B-4; York County Plan p. Q-26; North Carolina Plan Part 1, pp. 60-61, Part 2, pp. 29-31, Part 3, pp. 31-32. Intervenors have not shown why, pursuant to this guidance these plans are inadequate. Rather, Intervenors seek more - they want radioactive drugs to be placed in each residence. Applicants maintain that such a contention is beyond the scope of regulatory intent and absent a showing of why such a manner of distribution is necessary, the contention should be denied.

R. Contention EP18

In the event of an emergency, local telephone systems are inadequate to handle the immensely increased volume of telephone calls. Since notification of emergency personnel relies upon telephones and since those without vehicles are expected to call for a ride, major parts of the emergency communications system will be effectively knocked out. This applies especially to the notification of school bus drivers as specified in the plan.

Applicants oppose the admission of Contention 18 as being untimely. The contention is concerned with the capability of the telephone system to handle an increased volume of calls during an emergency. Applicants submit that there is nothing unique in the emergency plans that forms the basis for this contention. Rather, this contention could have been raised in the initial contentions filed in December, 1981.

S. Contention 19

State and local officials and other support personnel charged with responsibilities for action under the Catawba plant emergency plans do not possess the experience, training and technical ability to prepare for a radiological emergency and effectively implement the protective measures required in the plans. The tasks required of personnel under the plans presume knowledge and experience in emergency planning, radiation and radiation health effects, among other areas. Intervenor's members are informed that many specified officials at the state and local level as well as such other key personnel as student school bus drivers are woefully underqualified to perform their assigned tasks under the plans.

Although Applicants may anticipate the preparation and development of plans meeting the paper requirements of NUREG 0654, Rev. 1, "a good, well written plan is an important step toward achieving a preparedness capability, but it is only that." FEMA, Report to the President: State Radiological Emergency Planning and Preparedness in Support of Commercial Nuclear Power Plants (June 1980), p. VI-2. Nothing in the paper plans submitted by Applicants and others can demonstrate this necessary competence which in Intervenor's experience is seriously inadequate.

Applicants oppose the admission of this contention which raises a competency issue and a public drill issue. With respect to the competency issue the contention is totally devoid of specificity. Intervenor's make sweeping allegations as to the lack of experience, training and technical ability of involved personnel; no specifics whatsoever are provided. Given that information is presented in the various plans on this point, (SCORERP, Appendix B; South Carolina Catawba Site Specific, pp. 20-

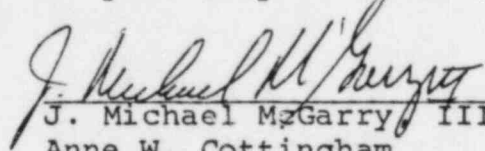
21; York County Plan, pp. Q39-Q42; North Carolina Plan Part 1, p. 97, Part 2, p. 46, Part 3, p. 49) it is incumbent upon Intervenor to provide specifics.

With respect to the need for public participation in drills, Applicants refer to the discussion set forth in response to Contention 14, supra.

III. Conclusion

In sum, Applicants request that the Board dispose of Intervenor's Emergency Plan contentions in the manner advanced in the instant pleading.

Respectfully submitted,

  
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August 1, 1983

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
DUKE POWER COMPANY, <u>et al.</u>	)	Docket Nos. 50-413
	)	50-414
(Catawba Nuclear Station,	)	
Units 1 and 2)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Applicants' Response To 'Palmetto Alliance And Carolina Environmental Study Group Supplement To Petitions To Intervene Regarding Emergency Plans'" in the above captioned matter have been served upon the following by deposit in the United States mail this 1st day of August, 1983.

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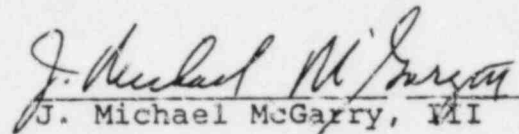
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