



response plans should be to provide dose savings for a spectrum of accidents that could produce offsite doses in excess of the PAGs." And "The ability to best reduce exposure should determine the appropriate response," (NUREG-0396, pp. 5 and 13). Clearly the protection of southwest Charlotte is required, although it extends past the "about 10 mile" radius considered for EPZ's, because it can be exposed to a significant radiation hazard which can be reduced by an appropriate response plan.

Testimony also shows the population density of southwest Charlotte to fall between 6 and 10 times that of the present EPZ. Evacuation will, consequently, be slower. Although evacuation, it was testified, of the present EPZ will take about 4 hours, that of southwest Charlotte is estimated to require about 7 hours.

The NRC staff's meteorology witness testified that under some conditions a slightly dispersed release could reach southwest Charlotte in as short a time as 2 hours.

To minimize delays in the evacuation of those prospectively exposed to a radioactive plume:

1. The plume boundaries and rate of movement must be known. This should be the case under present emergency response plans.
2. People who can avoid exposure should evacuate.
3. Evacuation roads lying in the plume pathway must be interdicted.
4. Evacuees must not be so delayed by traffic that the plume overtakes them.
5. People not in danger of plume exposure should not interfere with legitimate evacuee traffic.
6. Those who will not have enough time to escape the plume must shelter until there is a sufficient reduction in plume intensity to make evacuation and relocation the course providing the most effective dose savings.

To realize this rational and specific plan for the minimization of dosage, the siren/EBS procedure will not be adequate. It will be necessary to provide specific instructions to relatively small zones which will be responsive to the actual magnitude of the release, rate of release, and the instant meteorology.

Specific instructions as to whether to stay in, shelter a specific time and then relocate, or to evacuate within a specific time and by which of alternate routes can be provided by an appropriate computer-operated telephonic alert and notification system. Such systems have been given cognizance by the Federal Emergency Management Agency, "Standard Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants," (FEMA-43/September 1983, E.6.2.4.4, pp. E-15 & 16).

Testimony by Applicant's expert accoustical witness, Dr. Bassiouni, shows that 100% alerting and notification is not likely to be realized by the siren/EBS system within the 15 minute/5 mile and 45 minute/EPZ radius guidelines (FEMA-43/September 1983, E.4.0, pp. E-4 & 5) [sic].

The combination of siren/EBS and an appropriately designed telephonic alert and notification system will much more nearly reach the objective of timely, 100% notification.

Intervenors originally sought admission of their Contention 11 on July 11, 1983, by which they urged that the plume exposure pathway EPZ for Catawba Nuclear Station be expanded to cover all of Charlotte.<sup>1/</sup>

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1/ As proffered, Contention 11 read:

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 Plan, 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

In a Memorandum and Order, dated September 29, 1983, the original Licensing Board rejected Contention 11 as an impermissible attack on Commission regulations. The Board observed that "a contention that full emergency planning, including evacuation, should be developed for an area means that that area should be included in the plume EPZ." Noting that the area sought thus to be treated as within the EPZ extended to 25 miles from the plant, the Board ruled the contention as drafted to be an impermissible challenge to 10 C.F.R. § 50.47(c)(2), which provides for a plume EPZ of "about 10 miles."

However, the Board revised the contention in a manner which it determined would not constitute a challenge to the regulations, and admitted it as follows:

The size and configuration of the northeast quadrant of the plume exposure pathway emergency planning zone (Plume EPZ) surrounding the Catawba facility has not been properly determined by State and local officials in relation to local emergency response needs and capabilities, as required by 10 CFR 50.47(c)(2). The boundary of that zone reaches but does not extend past the Charlotte city limit. There is a substantial resident population in the southwest part of Charlotte near the present plume EPZ boundary. Local meteorological conditions are such that a serious accident at the Catawba facility would endanger the residents of that area and make their evacuation prudent. The likely flow of evacuees from the present plume EPZ through Charlotte access routes also indicates the need for evacuation planning for southwest Charlotte. There appear to be suitable plume EPZ boundary inside the city limits, for example, highways 74 and 16 in southwest Charlotte. The boundary of the northeast

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1/ (footnote continued)

fastest 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.

quadrant of the plume EPZ should be reconsidered and extended to take account of these demographic, meteorological and access route conditions.

In rejecting Applicants' motion to reconsider the admission of the Board-revised contention,<sup>2/</sup> the Board discussed several considerations (included in the contention itself) which it believed served as a possible basis for altering the size and configuration of the EPZ -- the location of certain highways, the population density in the areas adjacent to the current EPZ, and meteorological conditions.

In their motion, however, Intervenors argue that they interpreted the Board-revised version of Contention 11 to include the effectiveness of planning within Charlotte. The newly proffered Contention 20 would specifically require that the portion of the City of Charlotte within a 17-mile radius of the plant be included in the EPZ, and would require implementation of a computer-operated telephone alert and notification system for that area. Intervenors note that the purpose of seeking admission of Contention 20 is to serve as a basis for admitting the pre-filed testimony of Jesse L. Riley on Contention 11 (which challenged the adequacy of the alert and notification system established for the current EPZ as applied to the proposed extended zone). Motion, at 4. Intervenors also support their contention with arguments addressing the late-filing criteria in 10 C.F.R. § 2.714(a)(1). The Staff has reviewed Intervenors' Motion and believes it should be rejected as a challenge to

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<sup>2/</sup> See, Memorandum and Order, dated December 30, 1983, at 2-4,

10 C.F.R. §§ 50.47(c)(2) and based on a balancing of the late-filing factors in 10 C.F.R. § 2.714(a)(1).

## II. DISCUSSION

- A. Contention 20 is an Impermissible Challenge to 10 C.F.R. § 50.47(c)(2) to the Extent it would Require Detailed Planning for That Part of Charlotte Included in a 17-Mile Radius from Catawba.

As noted above, Contention 20 explicitly would extend the requirement for detailed emergency planning to that part of Charlotte within a 17 mile radius of the Catawba plant. As the original Licensing Board observed, such a proposal is tantamount, under NRC regulations, to seeking to extend the plume EPZ to that distance. December 30, 1983 Order, at 2. Unlike the Licensing Board's revision of Contention 11, which noted that various main highways could serve as part of the EPZ boundary if various other facts made extension of the EPZ to a limited distance into Charlotte appropriate, the proffered Contention 20 would arbitrarily extend the EPZ out to a radius of 17 miles so long as any such area included the City of Charlotte. The original Licensing Board took great pains to disclaim proposing a 17-mile EPZ.<sup>3/</sup> In this connection, the

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<sup>3/</sup> The Licensing Board stated:

As the Intervenors properly recognize (Riley Affidavit at 1), the Board has never "proposed" a "seventeen mile" EPZ, or an EPZ of any specific dimensions. The revised contention merely notes, as an example, that there appear to be certain highways in Southwest Charlotte that might serve as boundaries for a modified EPZ. One of those highways, at one stretch, is about seventeen miles from Charlotte. We referred to those highways primarily because they are the most prominent potential boundary lines on the maps supplied to us by the Applicants. But we did not mean to imply that there might not be equally suitable EPZ boundary lines in Southwest Charlotte closer to the Catawba facility. December 30, 1983 Order, at 3.

Board also noted that while it was not ready to say that an EPZ extending out to 17 miles was ipso facto inconsistent with the regulation, it gave an example of boundaries using highways meeting 17 miles from the plant which could hypothetically be based on a combination of population and meteorological considerations justifying extending the EPZ to 12 to 13 miles, and a determination that the most suitable boundary lines beyond that point were highways 16 or 17 miles from the plant. December 30, 1983 Order, at 3. Thus, the Board-revised Contention 11 should be distinguished from Intervenor's Contention 20, which arbitrarily selects a 17-mile radius for detailed planning. In the Staff's view, selection of a 17-mile radius is not within the language or intent of 10 C.F.R. § 50.47(c)(2).<sup>4/</sup> That provision makes it abundantly clear that adjustments to the 10-mile radius are to be made, not upon simple extension by a given number of miles, but based on "local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries." Contention 11 clearly was formulated with the type of justified adjustments to the 10-mile radius contemplated by the regulation. Contention 20 clearly is not so formulated. Since an arbitrary extension of the EPZ beyond 10 miles is inconsistent with 10 C.F.R. § 50.47(c)(2), Intervenor's proffered Contention 20 should be rejected as an impermissible challenge to Commission regulations.

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<sup>4/</sup> It may be noted that Intervenor's contention concedes that Southwest Charlotte "extends past the 'about 10 miles' radius considered for EPZ's . . ." Motion, at 2.

B. On Balance, the Late-Filing Criteria Weigh Substantially Against Admission of Intervenors' Late-Filed Contention 20.

Intervenors' Motion, at pp. 3-4, seeks to make a showing that the late-filing criteria in 10 C.F.R. § 2.714(a)(1)<sup>5/</sup> weigh in favor of admission of their late-filed Contention 20. Intervenors argue that good cause is provided because Intervenors believed, up until Mr. Riley's testimony on Contention 11 was stricken, that the adequacy of protective actions in an extended EPZ covering part of Charlotte was within the scope of Contention 11 as revised and admitted by the original Licensing Board (10 C.F.R. § 2.714(a)(1)(i)). Motion, at 3. Intervenors argue that there is neither another forum nor another party through which their interests can be adequately represented (10 C.F.R. § 2.714(a)(1)(ii)&(iv)). Id. at 4. It is also argued that Intervenors' participation in this proceeding demonstrates their ability to contribute to developing a sound record (10 C.F.R. § 2.714(a)(1)(iii)). Id. And finally, it is argued that if the contention were promptly

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<sup>5/</sup> The five factors to be weighed in considering the admission of late-filed contentions are as follows:

(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.



admitted, and the pre-filed testimony that previously was stricken were admitted as Intervenors' testimony, the contended matter could be heard during the previously scheduled (both now completed) hearings the week of June 5, 1984, causing no delay to the proceeding. Intervenors apparently rely on their own view of the scope of the admitted Contention 11 (as covering protective actions within the extended area) to show that the proffered Contention 20 would not unduly broaden the scope of the proceeding. Id.

The Staff respectfully disagrees with Intervenors' views as to the application of the late-filing criteria, believing they weigh substantially against admission of Contention 20.

1. Good Cause. First, it should be noted that there is little room for ambiguity in Contention 11, as admitted. It is clear that the reference in Contention 11 to "local emergency response needs and capabilities" is related to the appropriateness of the "size and configuration of the northeast quadrant of the plume exposure pathway emergency planning zone", and does not raise issues relating to the adequacy of protective actions already contained in existing plans or as they might be applied to an expanded zone. While Intervenors claim that until Mr. Riley's testimony was stricken they were not aware that the scope of Contention 11 did not reach the adequacy of particular proposed protective actions under the existing plan, the subjective understanding of Intervenors is not an appropriate standard for determining whether good cause exists for the lateness of Contention 20.

In The Detroit Edison Company, et al. (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-707, 16 NRC 1760, 1764-5 (1982), the Appeal Board

rejected a prospective intervenor's subjective test for good cause -- that it had been unaware of issues it sought to raise -- as an appropriate test whether applied to a prospective intervenor or to a party:

We would not allow a party to the proceeding to press a newly recognized contention after the evidentiary hearing was concluded unless the party could satisfy an objective test of good cause. Among other things, our standard requires that the party seeking to reopen must show that the issue it now seeks to raise could not have been raised earlier. Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523 (1973). [Footnote omitted.] We see no reason to employ a different and more lenient good cause standard for the late petitioner for intervention than for a party who is already in the proceeding and seeks to raise new issues.

Id., at 1765. Thus, the claim that Intervenor's misunderstanding of the scope of perviously admitted Contention 11 furnishes good cause for tardiness will not substitute for objective reasons why they could not have, in a timely fashion, sought to raise specific substantive issues with respect to protective actions or proposals for alert and notification for the area into which Intervenor's seek to extend the plume EPZ. Their original Contention 11 did not suggest particular plan deficiencies, and Intervenor's have offered no sound reason why their failure to have done so in a timely way should be excused. As a result, good cause is lacking, and the first late-filing factor weighs heavily against admission of Contention 20.

2. Other Means or Parties Through Which to Represent Intervenor's Interests. The Staff would agree that Intervenor's do not have another adjudicatory forum or another party in this proceeding through which its interests in Contention 20 can be represented. However, the Appeal Board noted in Fermi that these considerations, factors ii and iv, are considered to be of "relatively minor importance" in weighing the five

late-filing factors. Fermi, ALAB-707, supra, 16 NRC at 1767. See also, South Carolina Electric and Gas Company, et al. (Virgil C. Summer Nuclear Station, Unit 1), ALAB-642, 13 NRC 881, 895 (1981) (factors ii and iv "are given relatively lesser weight than the other factors").

3. Contribution to a Sound Record. At the recent hearings on emergency planning, Intervenors offered no witness to testify concerning the adequacy of protective actions or the adequacy of the alert and notification system in place for the plume EPZ, except for the testimony of Mr. Riley. During those hearings, the Licensing Board ruled that Mr. Riley was "sufficiently qualified to testify in connection with Contention 11. He has demonstrated by his experience and by his participation in this proceeding his ability to testify on this issue." (Margulies, J., Emergency Planning Transcript, page 2274). Although the Staff would argue that Mr. Riley has not qualified himself as an expert in alert and notifications systems, the Staff, based on the Board's ruling, would concede that, to the extent Contention 20 is limited to the scope of Mr. Riley's proffered testimony, factor iii marginally weighs in favor of admission.

4. Broadening of Issues and Delay. Contention 11 raises the issue whether the size and configuration of the plume exposure EPZ is appropriate in light of considerations such as demography, access routes, and meteorology. Testimony in the now concluded hearings on Contention 11 focused on the appropriateness of the current size and configuration of the EPZ, and whether it should be extended into southwest Charlotte in light of the above-noted considerations. The scope of Contention 11 is limited to the factors entering into the determination of the size and

shape of the EPZ, and does not at all address the adequacy of protective actions, or alert and notification, now proposed for the EPZ, as applied to an extended EPZ covering a portion of southwest Charlotte. To do so would significantly broaden the scope of the issues under consideration. Even confining Contention 20 to the issues raised by Mr. Riley's testimony would raise substantial new issues requiring further discovery and pretrial preparations, such as preparation of witness testimony to address Mr. Riley's proposals. These matters were not addressed by witnesses already offered, and experts in the new areas raised would need to be sought.

For similar reasons, admission of Contention 20 would cause delay to this proceeding. Except for this matter, the record has been closed and a schedule for proposed findings has been set. E.P. Tr. 4603. Admission of the contention, proffered only several days prior to the final week of hearings, would set into motion pre-trial procedures and a likely hearing which would substantially set back the likely completion date for the emergency planning phase of this bifurcated proceeding. In short, admission of Contention 20 would both broaden the issues and delay the proceeding. Thus, Factor v weighs heavily against admission of Contention 20.

Having examined each late-filing factor separately, several general observations are in order. First, the Appeal Board has noted that "the true importance of the tardiness will generally hinge upon the posture of the proceeding at the time the petition surfaces." Washington Public Power Supply System, et al. (WPPSS Nuclear Project No. 3), ALAB-747, November 15, 1983, slip opinion, at 8. Inasmuch as in the instant

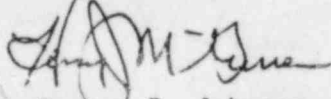
proceeding the late-filed contention comes virtually at the end of the hearing, and comes nearly a year after contentions were required to be filed, the importance of the presence or absence of good cause for tardiness is correspondingly greater. As the Appeal Board noted in Fermi, where good cause is not shown, "a petitioner must make a 'compelling showing' on the other four factors in order to justify late intervention." Fermi, ALAB-787, supra, 16 NRC at 1765 (citations omitted). In this case, such a "compelling showing" has not been made. While factor ii (the availability of other means to protect intervenors' interest), and factor iv (availability of existing parties to represent intervenors' interest) weigh in favor of admission, as noted, factors ii and iv in any circumstance are given relatively minor weight. And while, based on the Board's ruling qualifying Mr. Riley to testify, factor iii also weighs in favor of admission, it does not weigh heavily so. These three favorable factors are more than offset by the lack of good cause and by the substantiality of delay to, and broadening of, the proceeding which would necessarily occur were this record, now closed save for determination of this matter, to be further supplemented through additional hearings held on the new contention.

On balance, the lack of good cause and the unwarranted delay and broadening of the proceeding clearly outweigh the possible contribution to the record which might be made by Mr. Riley and the unavailability of other means or parties to protect or represent Intervenor's interests. As a result, Contention 20 should be rejected based on these late-filing considerations.

III. CONCLUSION

Inasmuch as proffered Contention 20 constitutes a challenge to Commission regulations and balancing of the five late-filing factors weighs decidedly against admission, the Board should reject Intervenors' new Contention 20.

Respectfully submitted,

  
for George E. Johnson  
Counsel for NRC Staff

Dated at Bethesda, Maryland  
this 19th day of June, 1984

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  
(Catawba Nuclear Station, ) 50-414  
Units 1 and 2 (Emergency Planning))

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO INTERVENORS' LATE-FILED CONTENTION ON EMERGENCY PLANNING FOR SOUTHWEST CHARLOTTE" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, by deposit in the Nuclear Regulatory Commission's internal mail system, this 19th day of June, 1984:

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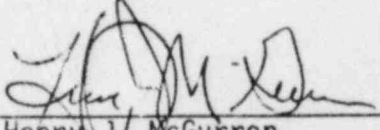
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