UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

BEFORE ADMINISTRATIVE JUDGES

James L. Kelley, Chairman
Dr. A. Dixon Callihan
Dr. Richard F. Foster

In the Matter of	ASLBP Docket No. 81-463-01OL
DUKE POWER COMPANY, ET AL.	Docket Nos. 50-413 50-414
(Catawba Nuclear Station, Units 1 and 2)	December 1, 1982

MEMORANDUM AND ORDER
(Reflecting Decisions Made Following Second Prehearing Conference)

On October 7 and 8, 1982, the Licensing Board conducted a second prehearing conference in Charlotte, North Carolina. The primary purposes of the conference were to determine the impact of the Appeal Board's ALAB-687 decision on the contentions in this case, and to consider additional contentions proposed by the Intervenors concerning the Staff's recently available draft environmental impact statement. All parties except the State of South Carolina appeared and participated in the conference. This memorandum sets forth the Board's decisions on the matters we addressed.

A. Impact of ALAB-687.

In ALAB-687, the Appeal Board accepted referral from this Board and decided three questions concerning our conditional admission of certain contentions in this case. In summary, the Appeal Board rejected the concept of conditionally admitting a vague contention, provided its proponent later supplies the requisite specificity, either following discovery or the availability of new documentary information. The Appeal Board held that --

> a licensing board is not authorized to admit conditionally, for any reason, a contention that falls short of meeting the specificity requirements of Section 2.714(a). Slip op at 11.

As a corollary of our conditional admission rulings, we had also held that we would not apply the five factors in Section 2.714(a)(1) of the Rules of Practice to contentions filed promptly following the public availability of necessary documents, and based on new information in those documents. The Appeal Board sustained this ruling, saying that --

> irrespective of when a licensing board is called upon to act, as a matter of law a contention cannot be rejected as untimely if it (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.

The Appeal Board's opinion was confined to an interpretation of the governing Rules of Practice. It left the application of that interpretation to this Board.

We called for and received comments from the parties on the impact of ALAB-687 on the contentions previously admitted conditionally. All parties agreed on two propositions: (1) that the Appeal Board's decision had no automatic effect on those contentions, but that (2) the Appeal Board's

rejection of the conditional admission concept made it necessary for the Licensing Board to vacate those portions of our earlier order conditionally admitting certain contentions. These two propositions are clearly correct. Accordingly, those portions of our March 5, 1982 Memorandum and Order conditionally admitting the following contentions are hereby vacated: Palmetto Contentions 1, 2, 3, 4, 6, 7, 10, 18, 21, 22 and 26; CESG Contentions 8, 9, 13, 16 and 17.

Having vacated our orders of conditional admission, we must determine the appropriate alternative disposition of the affected contentions. In that regard, we specifically asked the parties whether we should reconsider the individual contentions previously admitted conditionally and defer a further ruling if vagueness in a contention might be cured on the basis of a required document not yet available.

The positions of the parties differed markedly on these questions. The Applicants expressed the view that we had previously found these contentions lacking in the requisite specificity, and that therefore they should be dismissed from the proceeding without any further consideration. For their part, the Intervenors urged us to reconsider and admit as sufficiently specific the contentions that had been conditionally admitted subject to further specification following discovery; they asked us to defer a ruling on conditionally admitted contentions for which required documents are still not available. The Staff took an intermediate position on these questions, stating that --

> ALAB-687 may be interpreted as permitting the Licensing Board to take a second look at each of the contentions to reconsider whether they exhibit the requisite specificity. Staff Response at 8.

As the Staff recognized, our orders of conditional admission had rested on differing degrees of vagueness in the contentions -- e.g., "short of specificity requirements, whatever standard one applies" (Palmetto 5) compared to "marginally acceptable" (Palmetto 6, 7 and 18). Based on their analysis of these differences, the Staff indicated that the contentions previously admitted conditionally pending discovery might be reconsidered, but that the remaining contentions should be rejected now without any reconsideration. Finally, the Staff argued that rulings should not be deferred on the latter category of contentions pending availability of any necessary documents.

We agree in major part with the Staff on these questions. As they point out, we did not make an unequivocal finding of a fatal lack of specificity on many of the contentions admitted conditionally by our March 5 Memorandum and Order. Moreover, when we made those findings we were operating on the assumption that we had the option of conditionally admitting vague contentions, subject to later specification, instead of rejecting them outright. The presence of that assumption in the contention-ruling calculus probably would incline a licensing board more toward findings of vagueness, and we cannot say that it did not have that effect on us. In these circumstances, we have decided to reconsider from the standpoint of specificity all of the contentions listed above for which we have vacated our earlier orders of conditional admission.

With one minor exception, we now find that all of the contentions we admitted conditionally subject to specification to be based on documents not then available do not meet the specificity requirement of Section 2.714. The respects in which these contentions are unacceptably vague are

set forth in our March 5 Memorandum and Order and need not be repeated here. These contentions -- Palmetto 1, 2, 3, 4, 10, 21, 22 and 26; CESG 9 and 16 -- are rejected. The exception is the first sentence of CESG 8, which simply alleges that the plume exposure pathway emergency planning zone for Catawba should include the city of Rock Hill. Although in general emergency planning contentions are premature at this point because the plans are not available, we certainly cannot say that this part of CESG 8 lacks specificity. It is admitted. If, as we anticipate, the plume EPZ in the finished emergency plans does include Rock Hill, this contention will become academic.

Our reconsideration of contentions previously admitted subject to specification following discovery concerns Palmento 6, 7 and 18 and CESG 13 and 17. We find on reconsideration that Palmetto 18 and CESG 13 and 17 are fatally vague. Those contentions are rejected.

Much of Palmetto 6, which is concerned with substandard workmanship and poor quality control, lacks sufficient specificity. The last sentence, however, concerns alleged "corner cutting" and does supply a sufficient basis for a contention. We recast the contention that we now accept to read as follows:

> "Because of systematic deficiencies in plant construction and company pressure to approve faulty workmanship, no reasonable assurance exists that the plant can operate without endangering the health and safety of the public."

The thrust of this contention is primarily toward alleged company attitudes and practices; proof of this contention, presumably involving specific instances of misfeasance, need not be adduced at this stage.

We also find that Palmetto 7, while cast largely in general terms and therefore somewhat vague, meets minimal standards of specificity. This

"track record" contention questions the Applicant's managerial and technical competence to operate the Catawba facility safely, based in part upon past performance at other nuclear facilities.[1/] The Applicants oppose this contention, but their opposition goes largely to questions of proof that are not before us at the contention stage. Applicants' Response at 44-45. The Staff has supported admission of this contention, noting that it "is specific and a sufficient supporting factual basis has been provided." Accordingly, Palmetto 7 is admitted.

Concluding our consideration of ALAB-687, we noted earlier the possible option (supported by the Intervenors) of deferring rulings on vague contentions that might be superseded later by specific contentions based on newly available information. Although we have rejected those contentions, we acknowledge that such a deferral approach might have applied here to Palmetto 3, 4 and 26 (concerning emergency planning) and to Palmetto 21 and 22 and CESG 16 (concerning the control room).[2/] As we see it, deferral versus ruling now is a discretionary judgment for the Board. If, on the one hand, we had a large number of contentions for potential deferral, it might produce a net saving in Board time to defer; many such contentions probably would be withdrawn later and never have to

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1/ This contention is very similar to a "track record" contention recently admitted in the Shearon Harris proceeding upon stipulation of all parties. Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), Licensing Board Order of September 22, 1982, at 10.

2/ Although we have vacated our orders of conditional admission of these contentions, our directives to the Applicants to serve copies of the control room procedures and design review (Memorandum and Order of March 5, 1982 at 23, 26) remain in effect.

be considered. On the other hand, deferred contentions are relegated to a procedural limbo and complicate the posture of a case that is complicated enough without them. Where, as here, we are dealing with only a handful of contentions, it is cleaner procedurally and therefore preferable not to defer -- to rule the contention in or out -- as we have done. Of course, new information contained in documents not yet available may later provide a basis for more specific contentions.

B. Contentions on the Draft Environmental Statement.

Our Order of September 1, 1982, directed the Intervenors to file any revised or new contentions based on new information in the Staff's Draft Environmental Statement (DES) by September 22, 1982. In a joint filing, Palmetto and CESG filed 23 contentions concerning various aspects of the DES. CMEC filed a revised version of its Contention 4.

The new and revised contentions on the DES were not accompanied by a discussion of the five lateness factors in Section 2.714(a) and, under the circumstances, we did not expect such a discussion. Neither, however, were these contentions accompanied by an explanation why they could not have been advanced earlier, or, in the Appeal Board's words, how they are "wholly dependent" on a previously unavailable document. We believe that the proponent of a contention at this or some later stage of the proceeding should have the burden of explaining clearly, in appropriate detail, and separate from the rest of the contention, just what is new about the contention and why it could not have been advanced previously. It should not be the Board's or the other parties' job in the first instance to sort

through old documents and pleadings for that purpose. In this case we did not call explicitly for such an explanation in our preconference Order. But henceforth all parties are on notice that such a statement is required and that, in its absence and also in the absence of a showing on the five lateness factors, additional contentions will not be considered.

Palmetto/CESG Contentions.

In order to avoid confusion with the numbers of contentions previously submitted separately by Palmetto and CESG, we will refer to their jointly submitted contentions on the Draft Environmental Statement as "DES-1, DES-2, etc.

DES-1 and DES-22.

These two contentions fault the Reactor Safety Study (WASH-1400) and the reliance placed by the Staff upon it in the DES analysis of accidents more severe than design basis. With two exceptions noted below, the contentions cite no specific shortcomings of the methodology nor of the details of the calculations, such as the CRAC Code for describing meteorology. In this respect the contentions lack specificity.

The apparent assumption underlying these contentions is that WASH-1400 should not be used at all in risk analysis for licensing, as DES-22 puts it, such use is "entirely inappropriate." This assumption is incorrect. The discriminating use of WASH-1400 is not contrary to Commission policy. In accepting the report of the Risk Assessment Review Group (NUREG/CR-0400), which concluded that WASH-1400 provides the best available method for determining accident probabilities, the Commission stated that

> With respect to the component parts of the Study, the Commission expects the staff to make use of them as appropriate, that is, where the data base is adequate and analytical techniques permit. Taking due account of the reservations expressed in the Review Group Report and in its presentation to the Commission, the Commission supports the extended use of probabilistic risk assessment in regulatory decisionmaking. NRC Statement on Risk Assessment dated January 18, 1979, p. 4.

Shortcomings in the original WASH-1400 are taken into account in the Staff's DES analysis in various ways, including updated ("rebaselined") results for relevant risks.

DES-1 seeks to place in issue the characteristics of the accidents at Browns Ferry and Fermi, contending that they were "serious." It is beyond the scope of this proceeding to explore in any detail the characteristics of those accidents, at least in the absence of some showing that the Staff's analysis was dependent upon them. We find nothing in the DES to suggest that it was, and the Intervenors point to no such link.

The reactor modeled in the analysis is similar to that under construction at Catawba (DES at 5-36), except that it has an ice condenser containment. One specific shortcoming cited in Contention 22 is that the DES does not include a separate analysis of the ice condenser feature for its possible contribution to accidents. The Staff's position on this point appears at DES E-1, third paragraph, and is not clearly stated. Citing a Staff assessment of Sequoyah, also an ice condenser containment, the Staff acknowledges that that design feature is significant in relation to hydrogen control. The Staff goes on to say, however, that the Catawba applicant "has plans to satisfy the Commission's requirement on hydrogen control." We naturally assume the Applicants "plan" to meet present

Commission requirements. The quoted language may be intended as an oblique reference to the pending rulemaking on hydrogen control measures, and the fact that Catawba will be subject to its outcome. See Interim Requirements Related to Hydrogen Control, 46 Fed. Reg. 62281. In any event, "planned" compliance with rules is not a complete answer in this context, where accidents beyond design basis are being considered.

We do not believe, however, that any detailed accident analysis of the ice condenser feature is necessary in this DES. A more meaningful accident analysis of ice condensers and hydrogen control than could possibly be done here is now being done in the pending rulemaking; for that reason we are declining to litigate hydrogen accident scenarios as a safety issue in this individual case. See discussion at 24-28, below. There is an additional reason not to consider in any detail hydrogen-ice condenser accidents in the DES "severe accident" discussion, namely, that the DES discussion necessarily treats accident mechanisms with a broad brush. It will suffice if the Staff clarifies in the FES its vague and summary reference to the ice condenser feature and provides a brief description of the pending rulemaking. Thus, we view this part of Contention 22 as a valid comment on the DES, but it is not accepted as a contention.

Even though the final emergency plans have not been issued, the Staff includes some pessimistic assumptions in its analyses (DES F-1), including an example where no early evacuation occurs (DES F-3, Fig. F-1). This aspect of the DES conforms to the Commission's requirements for environmental impact statements. See Public Service Company of Oklahoma (Black Fox Station), 10 NRC 775, 779 (1979)). It is not necessary for

purposes of the DES analysis to consider accidents in the context of the details of emergency plans that will be adopted later.

The only portion of these two proposed contentions in which we find a valid contention is the third paragraph of DES-22, concerning the so-called "smoothing technique" in WASH-1400 and whether the Staff has compensated for its deficiencies in the DES. The Staff's response to DES-22 does not include any specific response to this part of the contention. The Applicants ignore this point. Although it could be more specific, the paragraph does raise a criticism about analytical methodology which warrants response. We are admitting the third paragraph of DES-22 as a contention, but we are staying any discovery on that contention until after the FES is available. We expect that the FES will contain discussion of this point which may satisfy the Intervenors.

Except as stated in the preceding paragraph, Contentions 1 and 22 are denied for lack of specificity and bases.

DES-2.

This proposed contention refers to an addition of sulfuric acid to the coolant stream in excess of the quantity necessary to react with a stated mass of sodium hypochlorite for the production of free chlorine intended as a biocide. Although the contention acknowledges the absence of a specified concentration of the sulfuric acid to be added, it proceeds to establish a firm rate of release of unreacted sulfuric acid. Sulfuric acid has a low vapor pressure and, accordingly, that part removed from the coolant system in the drift settles out in the nearby soil or onto objects. Sulfuric acid is described as a corrodant of many things, including the human respiratory system.

The characteristics of the water in the cooling tower system are, in large measure, like those of the blowdown, which is a liquid effluent subject to the National Pollutant Discharge Elimination System Permit issued by the State of South Carolina. This permit establishes a pH for the effluent in the range 6.0 to 9.0 (DES Table 4.5 at 4-29; DES at I-2). The pH of the drift blown from the tower into the atmosphere should be substantially the same. The State's determination in this regard is binding on the Board. The Board must then factor the environmental effects of the State's determination into its overall NEPA cost/benefit analysis. Public Service Co. of New Hampshire (Seabrook Station), 5 NRC 503, 543 (1977). Under this scheme, it is theoretically possible but unlikely as a practical matter that these effluents could significantly affect the environment and thus the cost/benefit balance.

Apart from these considerations, however, this contention is untimely. The cooling system and its operation were considered at the CP stage (CP FES, Sec. 5.5.2.3, at 5.40 and Sec. 3.6, Table 3.12; OL DES Sec. 4.2.3.4, at 4-3). One of the current intervenors proposed litigation of the sulfuric acid discharge at the CP hearing. Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), 7 AEC 82, 93 (1974). Most significantly, the subject is also discussed in OL-ER Sec. 3.6.2. The ER and DES do not differ in material respects in their discussions of this topic.

This contention is denied as untimely. The Intervenors may seek reconsideration upon an appropriate showing under 2.714(a)(i), if they continue to believe that this contention has merit.

DES-3.

This contention asserts that the DES is deficient because it does not address the impact that vapor state chlorine discharged from the cooling towers will have on people or on the corrosion of metals. The proffered reason for considering the subject at this time is that the OL-DES differs from the CP-FES in the amount and manner of chlorine addition.

Applying the guidance given in ALAB-687, this contention is not "wholly dependent" upon the content of the OL-DES; it could have been advanced prior to the first prehearing conference. The use of chlorine in the cooling tower was described at the CP stage and the modifications to the original method of application were explained in the Applicants' ER (§ 3.6.2.3). Although the quantities and kind of reagents now proposed differ from the CP specifications, the concentration of free available chlorine remains the same (DES at 4-3). The description in the OL-DES does not depart from the earlier presentation in any significant way. Consequently, we reject this contention as untimely. Should intervenors seek reconsideration they must supply information that will allow us to balance the five factors of 10 CFR § 2.714(a)(1).

DES-4.

The Applicants and the Staff oppose this and several other contentions on the basis that they are merely stylistic comments on the DES, not litigable safety or environmental issues. This is true of DES-4, which criticizes the use of English and metric units of measurements and different bases in time -- e.g., seconds, minutes, etc. The Staff should consider this proposed contention as a comment. The Intervenors agreed

that, with that understanding, they would withdraw this contention. Tr. 488-489.

DES-5 and DES-20.

As brought out at the conference (Tr. 490-496), the thrust of DES-5 is toward the fact that the McGuire facility has been operating recently around 75% of rated power because of steam generator problems. McGuire is described as a "sister plant" to Catawba, and this is said to "impinge on cost/benefit considerations." The contention's thesis is that the present and presumably temporary derating at McGuire should somehow be made applicable to the Catawba cost/benefit analysis.

In a very similar vein, DES-20 refers again to steam generator problems at McGuire and also at V.C. Summer Unit 1. Again it is alleged that the Staff's cost/benefit analysis is defective for not explicitly taking these problems into account.

The NEPA benefit in electric power to be produced by a nuclear facility is based upon a "capacity factor" which, as we understand the concept, is derived from operating experience at many similar reactors over the years. The capacity factor normally includes not only deratings for repair (like the steam generators at McGuire), but also maintenance checks, refueling, and any other necessary shutdown interval.

The annual average capacity factor used in the Catawba DES is 60%. DES at 6-2. Thus, the Staff's analysis appears to assume that the Catawba units could be shut down 40% of the time -- for whatever reason, including steam generator repair -- and still produce a net benefit. However, the DES does not spell out the elements that the Staff is including in its

capacity factor for Catawba, and particularly whether down times for major repairs are included. This information should be included in the FES.

If we are correct about the derivation of the capacity factor in the DES, then it would be arbitrary simply to add to that factor the deratings being experienced at McGuire or V.C. Summer, thereby counting them twice. Moreover, we are inclined to agree with the Staff that, even assuming a long-term derating at McGuire or Summer, it is not reasonable to assume that Catawba will experience a similar derating if and when it is licensed to operate.

The bases for these two proposed contentions are questionable for the reasons just discussed. In addition, however, they are clearly untimely. The derating of McGuire, the principal basis of both contentions, apparently became public knowledge between mid-1981 and mid-1982, before the issuance of the DES. Tr. 492-496. More importantly, the Applicants' ER in § 8.1.1 assumed a capacity factor of 76 percent. Since the Staff's 60% capacity factor is far more conservative, the genesis of this topic can hardly be ascribed to the DES. Contentions 5 and 20 are rejected as untimely.

DES-6.

This is a need for power contention which is barred by 10 CFR 51.53(c), as explained by the Staff in its comments (p. 20).

DES-7.

This contention would inject fixed capital costs (including construction costs) into the NEPA cost/benefit analysis. Such costs are deemed to be "sunk" and are beyond the scope of this operating license proceeding. See our March 5, 1982 Memorandum and Order at 29.

DES-8.

This is another impermissible need for power contention. Its central point is an alleged uncertainty whether the Catawba units "will be required to meet demand..." If not, the contention postulates "adverse and large" cost impacts. But under the Commission's recent need for power rule, we are to assume that Catawba will be needed. The rule requires rejection of this contention.

DES-9.

DES-9 contends that, with the post-CP enlargement of the fuel storage pool, the OL-DES should explicity consider the environmental consequences of both routine operation and accidents related to fuel handling and loss of pool water. In view of the sketchy treatment of these subjects in the DES, we are sympathetic to Intervenors' complaints. Nevertheless, we believe that the issue, as presented, must be handled as a comment on the DES rather than as a contention to be litigated at the OL hearing. Intervenors do not contend that there will be lack of compliance with any NRC requirement, nor do they identify the environmental consequences of concern or how the operation of the plant might result in those consequences being significantly greater than stated in the DES. This contention is denied for lack of a specific basis.

DES-10 and DES-19.

These contentions relate to the shipment of spent fuel from Oconee and McGuire to Catawba. Following the second prehearing conference, the Applicants served a motion dated November 5, 1982 requesting that we defer ruling on these contentions until there was clarification at least between

the Applicants and Staff about the applicability of Table S-4 to the proposed shipments. The Staff has filed a response in support of this motion and the Intervenors have not filed any opposition to it. This motion is granted and, as suggested by the Applicants, all parties are given ten days from the date of this Memorandum and Order to file a further pleading concerning their position on the applicability of Table S-4 values to this case.

DES-11.

The first two sentences of this contention about risk analysis (presumably of very severe accidents) allege that people placed at risk by Catawba are also placed at risk by McGuire. The two nuclear facilities are sited approximately equal distances in different directions (about 15 miles) from Charlotte, N. C., a major population center. It is contended that the Catawba risk assessment should take McGuire risks into consideration. (The remainder of the contention commends the staff on other aspects of the DES risk analysis, and is not relevant for present purposes.)

The DES includes a discussion of the probabilities and consequences of severe accidents at Catawba, as required by the Commission's Statement of Interim Policy. DES at 5-35 to 5-47. The discussion includes no explicit statement whether it considers risks arising from accidents at McGuire. In response to a Board question, however, the Staff sent a post-conference letter dated October 18, 1982 advising that the DES risk analysis of Catawba does not consider risks from accidents at McGuire. This approach was taken, the Staff tells us, not because of the particular geography of the site, but as a matter of policy. The Staff believes that this comports with the Statement of Interim Policy and 10 CFR 51.23(c).

The Staff may be correct in not taking McGuire risks into account in their Catawba risk analysis. But that conclusion is not so obvious that it requires no explanation. It is to be expected that people living in the vicinity of two (or more) nuclear facilities will feel more "at risk" than if there were only one facility (or none at all). In the case of Charlotte, N. C. and environs, such apprehension may be greater than in most other locations because of the relatively close proximity of both Catawba and McGuire. See Tr. 553-554.

These considerations are not directly addressed by the Statement of Interim Policy or 10 CFR 51.23(c). Thus the Staff's approach of disregarding the risks associated with McGuire in the Catawba serious accident analysis, while arguably deriving some inferential support from, is not clearly required by that Statement or rule. Conversely, one could argue that some recognition of risks posed by other nuclear facilities in the area is required by NEPA, as a full disclosure statute, and by the "possible cumulative impacts" language of 10 CFR 51.23(c). In any event, it is unfortunate that a recurring question of such importance apparently has no clear and present answer. A future answer may emerge from the Commission's Proposed Policy Statement on Safety Goals For Nuclear Power Plants, dated February 11, 1982.

In the absence of clear guidance, we believe that the FES should, at a minimum, contain some recognition of aggregate risks to the people who live between these two nuclear sites. Properly done, such an evaluation would portray the chances over time[3/] that "worst case" people who live

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3/ The Staff need not consider simultaneous accident scenarios at both facilities, which the Board does not consider credible.

between the two plants would suffer some health consequence as a result of a serious accident at either of the sites, taking into account the distances of people from each of the sites and other relevant factors.

Notwithstanding our reluctance to postpone rulings on proposed contentions, we are deferring our ruling on DES-11 until after the FES is available. If the Intervenors are satisfied with the treatment of this question in the FES, they can withdraw their contention. If not, we will consider next procedural steps at that point.

DES-12 and 13.

As suggested at the prehearing conference, the Intervenors and the Staff had some later discussions concerning whether certain proposed contentions might be withdrawn as contentions and treated as comments on the DES. By letter dated November 9, 1982, Counsel for the Staff advised that the Intervenors ---

> have agreed to withdraw their new contentions 12 and 13, dealing with Nitrogen-16 and thermoluminescent detectors. The Staff has agreed to treat these contentions as comments on the Draft Environmental Statement for Catawba, and to provide certain responsive information with respect thereto in the Final Environmental Statement.

On the basis of that understanding, these contentions are withdrawn. The Board appreciates the parties' informal resolution of these matters.

DES-14.

Intervenors express doubts about the way dose commitments were calculated for the DES and, accordingly, have concern that the DES dose commitments understate actual exposure. Section 5.9.3.1 referenced in the contention is actually generic in nature[4/] and attempts to convey

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4/ For example, see identically worded § 5.9.3.1 in the DES for Midland. NUREG-0537 at 5-19.

relevant features of the Staff's standard operating procedure for computing dose commitments, as detailed in Regulatory Guide 1.109, Revision 1. This Guide, issued in 1977, was also the basis of dose models used by the Applicants in the ER (see ER § 5.2.4), as explicitly noted there. Clearly, this contention is not "wholly dependent" upon the DES; it could have been advanced prior to the first prehearing conference. We reject it as untimely.

DES-15.

This proposed contention faults the DES for not including in dose assessments the radioactive decay products arising from the disintegration of noble gases which are produced in fission. Specific reference is made to krypton and xenon which, upon inhalation, are alleged to deposit radioactive solids in respiratory passages. The Intervenors have misread the DES. As pointed out by the Applicants, DES Table 5.8, on which the Intervenors rely, summarizes radionuclide activity in the reactor core, not in plant effluents. According to DES Table D.1, the dominant components in the predicted gaseous effluent from Catawba will be Kr-85 and Xe-133, which decay into stable nuclei. We reject this contention because it rests upon a significant mischaracterization of the DES. Apart from that mischaracterization, it lacks any basis.

DES-16.

This contention postulates an accident in which a heavy aircraft crashes into the spent fuel pool structure, with serious safety consequences. The DES does at least refer to such accidents in passing. DES at 5-33. However, the contention should be rejected on another basis. There is nothing new in the contention that was derived from the DES; the contention is in no sense dependent on the DES, whether "wholly" dependent,

or in some lesser degree. As the Applicants point out, aircraft hazards are discussed in some detail in the FSAR. See §§ 2.2.2.5 and 2.2.3.1.3. A contention with exactly the same factual allegations might have been based on the FSAR and proffered long ago. But this contention is clearly untimely now, and it is rejected.

DES-17.

DES-17 contends that the DES does not properly evaluate impacts of design basis and severe accidents because it does not isolate and analyze those impacts assuming extreme weather. Applicants and the Staff disagree, focusing their responses on the technique used. We accept this contention so that the propriety of what was actually done can be resolved on the record. There is a question about the timeliness of this contention. As to design basis accidents, it is arguably untimely because at least the same general subject is addressed in FSAR § 2.3.4 and ER § 7.1. However, the discussion of impacts of severe accidents in the DES is in response to the Interim Policy Statement and is new in this case. Therefore the contention clearly is not untimely as to severe accidents and must be admitted as to that aspect. Since similar factors should obtain for meteorology in analysis of both design basis and severe accidents, and since the timeliness of the design basis aspect is debatable, we admit the entire contention.

DES-18.

This contention faults the DES for not including in its discussion of "interdiction" an "evaluation of the availability of facilities for relocation and the non-monetary impacts of [re]location." As explained at the hearing, by "facilities for relocation" the Intervenors mean places to which people can permanently relocate. Tr. 605-606. We have already

rejected one contention that asserted a need for permanent relocation facilities on the ground, equally applicable here, that such facilities are not required by the rules. When the emergency plans become available, the Intervenors can scrutinize them for adequate "reentry and recovery" plans, 10 CFR 50.47(b)(13), and file a contention on any deficiencies they may find. The other aspect of this contention, concerning non-monetary impacts of relocation, is barred by the Commission's recent Statement of Policy on psychological stress. See Tr. 605; 47 Fed. Reg. 31762 (1982).

DES-19 and 20.

See discussion of DES-10 and -5, above.

DES-21.

DES-21 suggests that the Staff has seriously underestimated the health effects from facility operation because of reliance on BEIR-I and III, and because the transfer of radionuclides along food chains may be greater than assumed. This contention is essentially a resubmission of Palmetto's original Contention No. 1, augmented only by mention of BEIR-I and reference to some pages in the DES. Our order of March 5 admitted Palmetto 1 on the condition that it be made more specific following the availability of the DES. Our implementation of ALAB-687 has led us to reject Palmetto 1 for lack of specificity. The complaints in DES-21 are not much more specific than those in its rejected predecessor. Although DES-21 takes a broad initial swipe at Appendix C to the DES concerning uranium fuel cycle impacts, it does not follow up with any specific criticism. Similarly, the references to the "linear hypothesis" and "food chain analysis" are not tied to any discussions or conclusions in the DES. This contention is rejected for lack of a specific basis.

DES-22.

See discussion of DES-1, above.

DES-23.

This contention alleges that the Staff can no longer rely on Table S-3 for its evaluation of the environmental impacts of the uranium fuel cycle (see DES 5-47, -48) because of the decision by the U.S. Court of Appeals for the District of Columbia Circuit invalidating that rule. Natural Resources Defense Council, Inc v. NRC, No. 74-1580 (April 1982). The mandate in that case has been stayed and the stay will remain in effect at least until the Supreme Court acts on pending petitions for certiorari. In light of these developments, the Commission recently issued a Statement of Policy directing Licensing Boards to --

> proceed in continued reliance on the Final S-3 rule until further order from the Commission, provided that any license authorizations or other decisions issued in reliance on the rule are conditioned on the final outcome of the judicial proceeding.

Accordingly, this contention is rejected.

CMEC Contentions.

CMEC did not file any additional contentions on the Staff's DES. CMEC Contentions 1-3 were originally admitted subject only to the condition that CMEC would review the DES when it became available and make any appropriate revisions in light of that statement. That condition has been met and those contentions are now admitted unconditionally.

The original version of CMEC-4 concerning long-term health effects of radiation was somewhat vague and was admitted subject to the condition that it be made more specific or withdrawn in light of the Staff's DES. A revised and more specific version of CMEC-4 has now been submitted. The

Applicants have no objection to its admission. The Staff had some initial reservations about the revised contention but worked out a stipulation with CMEC. Tr. 443-444. Under that stipulation, Revised CMEC-4, as submitted in their pleading dated September 19, 1982, is admitted by the Board subject to the Staff-CMEC stipulation that the second numbered paragraph on page 2 be deleted.

Summary of Admitted Contentions.

The following contentions have been admitted to date:

CMEC: 1-4.

Palmetto: 6 (in part), 7, 8, 16 (in part), 27.

CESG: 8 (in part), 18.

Palmetto/CESG Joint DES Contentions: 17, 22 (in part).

C. Serious Accident Contentions.

Serious accident contentions were included in the initial Palmetto and CESG contentions. Palmetto 5 questioned the use of the Reactor Safety Study (WASH 1400) in the assessment of probabilistic risk and contended that serious accidents are "plainly credible after Three Mile Island." Palmetto 9 and 31 (CESG 2) concerned the possibility of an explosive hydrogen-oxygen recombination, resulting in failure of the containment.

This Board's Memorandum and Order of March 5 rejected these contentions pointing out that (1) the very generalized concerns expressed in Palmetto 5 were not specifically related to the current licensing

actions for Catawba and (2) the hydrogen issues postulated in Palmetto 9 and 31 (CESG 2) are the subject of an ongoing rulemaking process. We recognized, however, that hydrogen issues might be litigated in this individual licensing proceeding if, in the Commission's words, "--a credible loss-of-coolant accident scenario entailing hydrogen generation, hydrogen combustion, containment breach or leaking, and offsite radiation doses in excess of Part 100 guideline values" were to be advanced. Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), 11 NRC 674, 675 (1980). No such scenario was advanced with the subject contentions, but our March 5 Order left the door ajar should the Intervenors come forward with credible hydrogen or other serious accident scenarios. The Intervenors thereafter postulated several accident scenarios in their Responses and Objections to the March 5 Order.

We then asked the Applicants and the Staff to comment on whether any of the Intervenors' scenarios might form the basis for an acceptable contention. Both argue, although for different reasons, that the Stud Bolt Failure scenario should be rejected. We agree with the Applicants' position that yet another relitigation of this particular scenario is barred by the doctrines of res judicata and collateral estoppel. CESG has been unsuccessfully attempting to challenge the safety of Duke Power Co.'s reactor stud bolts since the McGuire construction permit proceeding in 1972-73. The basic scenario -- a stud bolt failure, followed by an "unzippering" of the reactor head, followed by the reactor head's penetrating containment as a speeding projectile -- has been the same since then. The McGuire Licensing Board heard evidence on this scenario and rejected it. Duke Power Co. (McGuire Nuclear Station), 6 AEC 92, 106-108

(1973). In the construction permit proceeding for Catawba, the Licensing Board again considered the CESG stud bolt scenario, limited, however, "to the extent that new information has become available since the McGuire decision." Duke Power Co. (Catawba Nuclear Station), 1 NRC 626, 642-646 (1975). Once again, CESG's contention was rejected on the merits. We see nothing in the present stud bolt scenario to differentiate it from its predecessors, and CESG points to nothing new. Therefore the proffered contention -- a matter already litigated between the same parties at the construction permit stage -- may not be relitigated now. Alabama Power Co. (Farley Nuclear Plant), 7 AEC 210 (1974); Southern California Edison Co. (San Onofre Nuclear Generating Station), 15 NRC 61, 78-82 (1982). The fact that Palmetto is also sponsoring this scenario is irrelevant. The two organizations are joint sponsors and their interests for present purposes are indistinguishable.

The remaining three accident scenarios concern hydrogen control and present a somewhat different problem. The Applicants oppose admission of these scenarios as contentions primarily on the ground that they presuppose successive failures of systems that comply with the rules, and that therefore they should be viewed as impermissible attacks on these rules.[5/] The Staff takes the position that these scenarios are

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5/ There may be some merit in this argument, although it seems to be contradicted by the Commission's allowance of "credible scenario" contentions in the TMI Restart case. Similarly, one could argue that the scenarios are an outgrowth of Palmetto 9 and therefore an impermissible attack on 10 CFR 50.44 because Palmetto 9 is taken almost verbatim from § 50.44. Conversely, one can argue that the hydrogen scenarios themselves should be read as contentions under Part 100. We do not reach these rather legalistic arguments, preferring to rest our decision on the more practical considerations discussed in the text.

sufficiently specific and should be admitted for the purpose of litigating their credibility.

The applicable law on this question is not entirely clear. As a general proposition generic issues that are the subject of an ongoing rulemaking need not be litigated in individual cases. We relied on that proposition and the Appeal Board's Rancho Seco decision[6/] in dismissing the hydrogen control contentions on March 5. On the other hand, the pendency of a generic rulemaking does not necessarily preclude litigation of related issues in individual cases. In the TMI Restart case,[7/] for example, the Commission allowed certain hydrogen control issues to be litigated when a broad rulemaking proceeding on hydrogen control was in the immediate offing. The Commission can and sometimes does remove any doubt on this score by specifically stating whether boards should continue to litigate generic issues while a rulemaking on them is pending. But since the Commission has provided no explicit guidance here, we must exercise an informed discretion in the circumstances of this case.

The basic criterion is safety -- is there a substantial safety reason for litigating the generic issue as the rulemaking progresses? In some cases, such as TMI Restart, such litigation probably should be allowed if it appears that the facility in question may be licensed to operate before the rulemaking can be completed. In such a case, litigation may be

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6/ Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), 14 NRC 799, 816 (1981).

7/ Metropolitan Edison Co. (Three Mile Island Nuclear Station), 11 NRC 624, 625 (1980).

necessary as a predicate for required safety findings. In other cases, however, it may become apparent that the rulemaking will be completed well before the facility can be licensed to operate. In that kind of case there would normally be no safety justification for litigating the generic issues, and strong resource management reasons not to litigate.

The present case is clearly in the latter category. The pertinent rulemaking directly addresses the Intervenors' hydrogen concerns. Among other things, the proposed rule would impose "improved hydrogen control systems for ... pressurized water reactors with ice condenser type containments" like Catawba. 46 Fed. Reg. 62281. The technical review being conducted in the rulemaking features both depth and breadth, including "review of the deliberate ignition systems installed at Sequoyah and McGuire ..., a spectrum of degraded core accident scenarios ... and several hydrogen combination phenomona." Id. at 62282. It now appears that a final rule will be adopted in the next several months.[8/] Given the present status of this proceeding, no operating licenses for Catawba are likely to issue before sometime in 1984, a year or more after the final rule. Thus we see no safety justification for litigating the Intervenors' hydrogen scenarios in this case, and we are rejecting them as proposed contentions.

8/ A recent notice in the Federal Register provided a timetable for the rulemaking, indicating that a final rule was expected in October 1982. 47 Fed. Reg. 48968. The Chairman of this Board telephoned Counsel for the Staff about the present timetable and was advised that a final rule is now anticipated by the Staff in January or February, 1983.

We regret that we were not able to foresee all of these developments in March, when we suggested that credible accident scenarios might be considered. In any event, it makes no sense to consider them under present circumstances.

This does not mean that the Intervenors may not have their hydrogen scenarios considered at all. They were free to submit those scenarios as timely comments in the rulemaking. It they did not choose to do so before the comment period expired, they can be submitted now and still be considered, if that is practical for the rulemaking staff. Id.

D. Discovery.

Our Memorandum and Order of July 8, 1982 suspended all discovery pending further order of the Board, except with respect to Palmetto Contentions 8, 16 and 27. That suspension order is now lifted and discovery may be resumed on all but one of the admitted contentions, as listed on page 24, above. Discovery on the admitted part of DES-22 is stayed until the FES is available.

Several discovery motions and related pleadings are pending before the Board. Rulings on these matters will be issued shortly.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

James L. Kelley

James L. Kelley, Chairman
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland,
this 1st day of December, 1982.