

RELATED CORRESPONDENCE

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of)

DUKE POWER COMPANY, et al.)

(Catawba Nuclear Station,)
Units 1 and 2))

Docket Nos. 50-413
50-414

APPLICANTS' MOTION FOR SUMMARY DISPOSITION

Pursuant to 10 C.F.R. §2.749, Duke Power Company, et al. ("Applicants") herein move the Atomic Safety and Licensing Board ("Board") in the captioned proceeding to grant summary disposition as to Intervenor Palmetto Alliance's Contentions 16, 27 and 44, on Intervenor Carolina Environmental Study Group's (CESG) Contention 18¹, and on DES Contentions 17 and 19, which are jointly sponsored by Palmetto Alliance and CESG. Applicants submit that as to each of the foregoing contentions there is no genuine issue as to any material fact, and that Applicants are therefore entitled to summary disposition in their favor as a matter of law.

In accordance with §2.749, there are attached to this Motion with respect to each contention a statement of the material facts as to which there is no genuine issue to be heard, a brief discussion of the contention, and supporting affidavits.

¹ Palmetto Alliance's Contention 44 and CESG's Contention 18 were consolidated pursuant to the Board's Memorandum and Order of June 20, 1983, at pp. 15-17.

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ARGUMENT

Applicable NRC and federal authority compel summary disposition in the absence of disputed issues of material fact

The Commission's Rules of Practice with respect to contentions are designed to insure that only contested issues involving disputes over material facts will be adjudicated in NRC proceedings.² In particular, 10 C.F.R. §2.749 provides for summary disposition of contentions on the pleadings where

the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law.

Both the Commission and the Appeal Board have encouraged the use of summary disposition to dispense with the litigation of contested contentions where an intervenor fails to establish that a genuine issue of material fact³ exists with regard to the contention. Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-73-12, 6 AEC 241, 242 (1973), affd. sub nom. BPI v. AEC, 502 F.2d

² See Philadelphia Electric Co., et al. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974), wherein the Appeal Board stated (p.21) that:

there must ultimately be strict observance of the requirements governing intervention, in order that the adjudicatory process is invoked only by those persons who have real interests at stake and who seek resolution of concrete issues. The fact that a contention may be adequate for purposes of Section 2.714 does not mean that it necessarily gives rise to a genuine issue which must be heard--such a contention is subject to being summarily rejected on the merits under the provisions of Section 2.749 of the Commission's Rules of Practice.

³ A material fact is one that may affect the outcome of the litigation. Mutual Fund Investors, Inc. v. Putnam Management Co., 553 F.2d 620, 624 (9th Cir. 1977).

424 (D.C. Cir. 1974); Houston Lighting and Power Co. (Allen's Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 550 (1980) (Summary disposition provides "an efficacious means of avoiding unnecessary and possibly time-consuming hearings on demonstrably insubstantial issues . . ."). See also the Commission's Statement of Policy on the Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452 (1981), wherein the Commission noted its determination to seek to avoid or reduce delay in licensing proceedings "whenever measures are available that do not compromise the Commission's fundamental commitment to a fair and thorough hearing process." Id. at 453. One of the procedural tools which the Commission urged its licensing boards to use in "exercising [their] authority to regulate the course of a hearing" is to encourage parties to "invoke the summary disposition procedure on issues where there is no genuine issue of material fact so that evidentiary hearing time is not unnecessarily devoted to such issues." Id. at 457.

The availability of summary disposition in NRC proceedings serves as a counterbalance to the lenient standards for admission of contentions. As the Appeal Board has acknowledged, the fact that a contention may be adequate for the purpose of admissibility under §2.714 "does not carry with it any implication that we view the contention to be meritorious" (Houston Lighting and Power, supra, 11 NRC at 549), or that it "necessarily gives rise to a 'genuine issue' [which must] be heard . . .". Mississippi Power & Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 425 n.4 (1973). Thus a hearing on every contention admitted "is not inevitable;" rather, whether one will be necessary "wholly depends upon the ability of the intervenors to demonstrate the existence of a genuine issue of material fact respecting any of the issues they previously raised." Philadelphia Electric Co., et

al. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-654, 14 NRC 632, 634 (1981).

In sum, the purpose of summary disposition in NRC proceedings is not to deny a party his right to a trial if in fact he has an issue worthy of adjudication (e.g., hard evidence to be offered at trial). Rather, a summary disposition motion is designed to test, in advance of trial, whether such evidence in fact exists. Gulf States Utilities Co. (River Bend Station, Units 1 and 2), LBP-75-10, 1 NRC 246, 247-48 (1975). Section 2.749 "provides an ample safeguard against an applicant or the regulatory staff being required to expend time and effort at a hearing on any contention advanced by an intervenor which is manifestly unworthy of exploration." Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-183, 7 AEC 222, 228 (1974). In view of the facts in this proceeding, summary disposition is entirely appropriate.

Section 2.749 of the Commission's Rules of Practice is analogous to Rule 56 of the Federal Rules of Civil Procedure, which governs motions for summary judgment. While judicial proceedings and administrative adjudicative proceedings are not interchangeable, NRC Licensing and Appeal Boards have determined that "the principles governing summary judgment in Federal practice are appropriate for use in determining motions for summary disposition . . ." Public Service Company of New Hampshire, et. al. (Seabrook Station, Units 1 and 2), LBP-74-36, 7 AEC 877, 878 (1974).⁴

⁴ See also Alabama Power Co. (Joseph M. Farley Nuclear Plant, Units 1 and 2), ALAB-182, 7 AEC 210, 217 (1974); Texas Utilities Generating Co., et al. (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-82-17, 15 NRC 593, 595 (1982).

Under both Federal and NRC rules, the burden of demonstrating the absence of any issue of material fact is upon the moving party.⁵ In determining whether the movant has met this burden, the record is to be viewed in the light most favorable to the party opposing the motion.⁶

If the movant's papers are sufficient to support the motion, the opposing party must controvert the showing. A party opposing a motion for summary disposition need not show that he will prevail on the contention at trial; but, rather, only that there exists a genuine issue for trial. Gulf States Utilities Co., supra, LBP-75-10, 1 NRC at 247. Nevertheless, the opponent's version of the facts must support a viable legal theory which, if accepted, would entitle him to a judgment as a matter of law. Mutual Fund Investors, supra, 553 F.2d at 624. The opponent must make a substantive and specific factual showing (demonstrating that a genuine and material issue of fact exists which is worthy of adjudication) if the motion is to be defeated. Section 2.749(b) stipulates that

[w]hen a motion for summary decision is made and supported as provided in this section, a party opposing the motion may not rest upon the mere allegations or denials of his answer; his answer by affidavits or otherwise . . . must set forth specific facts showing that there is a genuine issue of fact.

⁵ Adickes v. S. H. Kress & Co., 398 U.S. 144, 157 (1970); Cleveland Electric Illuminating Co., et al. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 752-54 (1977); Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), LBP-81-48, 14 NRC 877, 883 (1981).

⁶ Adickes, supra, 398 U.S. at 157 (1970); Pennsylvania Power & Light Co., et al. (Susquehanna Steam Electric Station, Units 1 and 2), LBP-81-8, 13 NRC 335, 337 (1981).

F.R.C.P 56(e) contains virtually identical language. Thus at this stage in the proceeding, mere allegations are insufficient to establish the existence of an issue of material fact. The opposing party is not "entitled to go to trial on the vague supposition that something may turn up." 6 Moore's Federal Practice ¶56.15[5]. See First National Bank of Arizona v. Cities Service Co., 391 U.S. 253, 289-90 (1968) (F.R.C.P. 56 should not be read to permit parties to "get to a jury on the basis of the allegations in their complaints, coupled with the hope that something can be developed at trial in the way of evidence to support those allegations")

Moreover, the facts set forth in opposition to the motion⁷ must be presented in an appropriate form. Conclusions of law and mere arguments are not sufficient.⁸ Rather, the facts asserted by the opposing party must be material⁹ and of a substantial nature,¹⁰ not frivolous, conjectural nor merely suspicions.¹¹ One cannot avoid summary disposition

⁷ "All material facts set forth in the statement required to be served by the moving party will be deemed to be admitted unless controverted by the statement required to be served by the opposing party." 10 C.F.R. §2.749(a).

⁸ Kung v. Fom Investment Corporation, 563 F.2d 1316, 1318 (9th Cir. 1977); Citizens Environmental Council v. Volpe, 484 F.2d 870, 873 (10th Cir. 1973); Gulf States Utilities Co., *supra*, LBP-75-10, 1 NRC at 248.

⁹ British Airways Board v. Boeing Co., 585 F.2d 946, 952-53 (9th Cir. 1978) ("[I]f the factual dispute is immaterial, it cannot be held to bar the granting of summary judgment."); Gulf States Utilities Co., *Id.*

¹⁰ Southern Distributing Co., Inc. v. Southdown, Inc., 574 F.2d 824, 826 (5th Cir. 1978) ("[A] pretended issue, one that no substantial evidence can be offered to maintain, is not genuine."); Gulf States Utilities Co., *Id.*

¹¹ Stevens v. Barnard, 512 F.2d 876, 878-79 (10th Cir. 1975); Robin Construction Co. v. United States, 345 F.2d 610, 614 (3rd Cir. 1965) (In resisting a motion for summary judgment, it is not enough to rely on suspicions or to "post philosophic doubts regarding the conclusiveness of evidentiary facts."); Gulf States Utilities Co., *Id.*

on the mere hope that at trial he will be able to discredit movant's evidence; he must . . . be able to point out to the court something indicating the existence of a triable issue of material fact. [6 Moore's ¶56.15(4)].

Both F.R.C.P. 56(e) and 10 C.F.R. §2.749(b) contemplate that motions for summary disposition may be accompanied by supporting affidavits. Section 2.749(b) requires that such affidavits "shall set forth such facts as would be admissible in evidence and shall show affirmatively that the affiant is competent to testify to the matters stated herein." F.R.C.P. 56(e) contains essentially identical language.

The purpose of these provisions is to limit the content of the affidavits to evidentiary matter which would be admissible if the affiant were on the witness stand. In federal practice, affidavits containing statements made merely "on information and belief" will be disregarded because the affidavit must reflect the personal knowledge of the affiant.¹² Similarly, in NRC practice affidavits, said to be "true to the best of my knowledge, information and belief" are insufficient to demonstrate the affiant's competence to testify to the facts in the affidavit. Cleveland Electric Illuminating Co., supra, 6 NRC at 755-56 (1977); Pacific Gas & Electric Co. (Stanislaus Nuclear Project, Unit 1), LBP-77-45, 6 NRC 159, 163 (1977). Moreover, hearsay testimony and opinion testimony which would not be admissible at trial may not properly be included in the affidavit, nor may ultimate facts and conclusions of law. 6 Moore's ¶56.22 [1]. In sum, "[c]are should be taken by the trial court to make sure affidavits meet the requirements of Rule 56(e)." Id. This insures that attempts by a party to "create a smokescreen in resisting summary

¹² Carey v. Beans, 500 F. Supp. 580, 583 (E.D.Pa. 1980).

disposition in a case that has no business going to trial" will not succeed. Id. A similar purpose is served when affidavits in NRC proceedings are reviewed by an equally stringent standard.

In sum, if intervenors

present evidence or argument that directly and logically challenge the basis for summary disposition, creating a genuine issue of fact for resolution by the Board, then summary disposition cannot be granted. On the other hand, if intervenor's facts are fully and satisfactorily explained by the other parties, without any direct conflict of evidence, then intervenors will have failed to show the presence of a genuine issue of material fact. [Cleveland Electric Illuminating Co., et al. (Perry Nuclear Power Plant, Units 1 and 2), LBP ____, December 22, 1982, slip op. at p. 4].

There is an absence of disputed issues of material fact with regard to Palmetto Alliance Contentions 16, 27, 44 (CESG 18), and Palmetto Alliance/CESG Contentions DES 17 and DES 19.

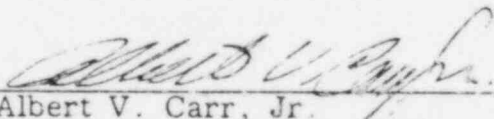
As reflected in the attached "Argument and Documentation" regarding Palmetto Alliance Contentions 16, 27, 44 (CESG 18), and Palmetto Alliance/CESG Contentions DES 17 and DES 19, no genuine issue of material fact exists. Such is occasioned primarily by Intervenor's lack of responsiveness to Applicants' and Staff discovery requests. As noted in various pleadings filed by Applicants with this Board, information supplied by Intervenor has been for the most part unresponsive and evasive, consisting basically of unsupported allegations and the raising of hypothetical queries. In that Intervenor must demonstrate the existence of a genuine issue of material fact in order to overcome a motion for summary disposition, their past pattern of behavior must work heavily against them. Simply put, Intervenor's inability to assert facts during discovery should be dispositive of the issue. Only a compelling showing of why subsequently alleged facts (as opposed to unsupported

innuendos) could not have been provided in discovery should be permitted to cure Intervenor's deficient responses. These facts are to be presented in affidavit form by a knowledgeable individual.

In addition, several contentions lend themselves to dismissal on legal grounds. Affidavits of various members of Applicants' technical staff provide additional grounds for dismissing the subject contentions.

In sum, Applicants respectfully request that their Motion for Summary Disposition be granted.

Respectfully submitted,


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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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DUKE POWER COMPANY, et al.)
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ARGUMENT AND DOCUMENTATION IN SUPPORT OF MOTION
FOR SUMMARY DISPOSITION OF PALMETTO ALLIANCE CONTENTION 16

I. The Contention

Palmetto Alliance's Contention 16, admitted by the Board's Memorandum and Order of July 8, 1982, is as follows:

Applicants have not demonstrated their ability safely to store irradiated fuel assemblies from other Duke nuclear facilities so as to provide reasonable assurance that those activities do not endanger the health and safety of the public. [at pp 7-8].

Applicants interpret the contention to mean that the storage of Ocoree and McGuire spent fuel at Catawba poses a threat to public health and safety.^{1/}

II. Material Facts As To Which There Is No Genuine Issue To Be Heard

A. Palmetto Alliance Contention 16 consists of three parts:

1. The design of the enlarged pools has not adequately accommodated the expanded Catawba heat load;

^{1/} See Memorandum and Order of December 22, 1982 at p. 22 wherein the Board recognized that "it is not unreasonable for the Applicants to place their own interpretation on the contention." See also p. 19.

2. The increased potential for cask drop and fuel handling accidents;
 3. The potential for aircraft crashes to threaten public health and safety. Palmetto Alliance's Supplementary Responses to Applicants' and Staff's Interrogatories, April 19, 1983 at pp. 51-52; Palmetto Alliance's Further Supplementary Responses, May 27, 1983 at pp. 22-26.
- B. Palmetto Alliance does not contend that there is any fundamental difference between Catawba spent fuel and Oconee/McGuire spent fuel such that one results in a greater heat load than the other. Intervenors' Responses to Applicants, June 6, 1983 at p. 7.
- C. Applicants, referring to compliance with the NRC Standard Review Plan and Regulatory Guidance, maintain that the spent fuel pool cooling system satisfies GDC 44 and 61. Further, under normal conditions, the failure of one train will not compromise the design temperature parameter; under abnormal conditions, consideration of failure of either train is inappropriate. See NRC Standard Review Plan 9.1.3.III.1.d. This Board barred consideration of loss of on-site power. Affidavit of A. L. Snow at pp. 1-4.
- D. Applicants maintain the GDC 62 is inapplicable to the cooling capacity aspect of Palmetto Alliance Contention 16. However, Applicants do satisfy the "criticality" aspect of GDC 62. Id. at pp. 4-5.
- E. In the event of an accident which renders the cooling system inoperative, the stored spent fuel assemblies will remain covered for at least 72 hours. Id. at p. 4.

- F. The NRC recognizes that 72 hours is sufficient time for the operator to initiate corrective actions in recovering from beyond-design basis fault conditions. Id. at p. 4.
- G. Redundant manually initiated makeup sources can provide virtually unlimited fuel pool makeup from the refueling water storage tank (by means of gravity feed) and the ultimate heat sink (the Nuclear Service Water System). Id. at p. 3.
- H. The spent fuel pool liner will not rupture in the event the fuel pool temperatures exceed the 150°F for which the pool liner is designed. At 212°F the leak tight integrity of the spent fuel pool liner system is maintained. Even if the liner did fail, calculations indicate that a total outflow through all of the cracks in the concrete surfaces of the fuel pool would be less than one-half gallon per day. Affidavit of Michael C. Green at pp. 1-2.
- I. Applicants' analyses, which are described in the FSAR (FSAR Section 9.1.2.3) demonstrate that a dropped cask cannot enter the fuel pool.
- J. Cask handling rails do extend over the fuel pool. Prior to operation, mechanical stops will be in place which will physically prevent the cask handling crane from traversing the spent fuel pool area. This is described in FSAR Section 9.1.4.2.3.
- K. Applicants maintain that GDC 61 and GDC 62 as they relate to the cask drop issue are satisfied. Affidavit of Michael C. Green at pp. 3-4; affidavit of M. S. Tuckman at pp. 3-7.
- L. Applicants have written fuel handling procedures at Oconee and McGuire. Affidavit of M. S. Tuckman at p. 2.

- M. Applicants will have similar written fuel handling procedures at Catawba. Id.
- N. A description of Applicants' procedures to be used at Catawba is set forth in the affidavit of Michael Tuckman. Id. at pp. 3-7.
- O. The described procedures satisfy GDC 61. Id.
- P. GDC 2 and 4 do not require consideration of aircraft accidents. Affidavit of Michael C. Green at p. 4.
- Q. Applicants have considered aircraft crashes and determined the probability of occurrence to be 10^{-7} . FSAR Section 2.2.3.1.3 The NRC Staff concurs. See Section 2.2.2.

III. Discussion

Palmetto Alliance offers three scenarios in support of Contention 16:

- A. The design of the enlarged pools has not adequately accommodated the expanded Catawba heat load;
- B. The increased potential for cask drop and fuel handling accidents;
- C. The potential for aircraft crashes to threaten public health and safety.

See Palmetto Alliance's Supplementary Responses to Applicants' and Staff's Interrogatories, April 19, 1983 at pp 51-52; see also Palmetto Alliance's Further Supplementary Responses to Applicants' and Staffs' Interrogatories, May 27, 1983 at pp. 22-26. Applicants address each scenario below.

A. Cooling Capability

Palmetto Alliance's position with respect to its inadequate cooling allegation is contained in two interrogatory responses. These responses are set forth below:

Palmetto Alliance contends that the design of the enlarged pools has not adequately accommodated the expanded Catawba heat load being

experienced from the more than doubling in the number of assemblies to be stored including the Oconee and McGuire spent fuels such that the 150 degree F. heat limit on the design pool liner plate and the potential for fuel pool water boil-off with resulting potential fuel element degradation, hydrogen gas generation and potential radiation release remains a threat. A single train of the spent fuel pool cooling system could likely not maintain water temperature below 150 degrees F. Under the assumptions of Duke's September 76 heat load study, pool water boiling could occur in as little as 6.9 hours after loss of both cooling trains. Palmetto is concerned that loss of on-sight/off-sight [sic] power could quickly threaten pool water boil-off. [Palmetto Alliance Supplementary Responses, April 19, 1983 at pp 51-52]

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Palmetto Alliance believes that there is an unacceptably high probability that the water in the Catawba spent fuel pool will reach and surpass the 150°F heat limit which could result in ruptures in the pool liner plate, pool water leakage, and boil-off. This could in turn result in fuel element degradation, hydrogen gas generation and potential radiation release. Such an occurrence is made more likely because of the fact that design modifications at Catawba that more than double the number of fuel assemblies to be stored (thereby dramatically increasing the heat load) have significantly reduced the margin for error. In other words, the cooling trains and other structures, systems, and components important to safety were designed to operate with respect to a much lower heat load than the subsequent modifications of the cascade plan call for. If the safety related systems were designed so as to prevent water temperature in the pool from reaching dangerous levels when the pool contained a maximum of 662 fuel assemblies, then expanding the pool to hold 1418 assemblies significantly increases the heat load and reduces the margin for error. Thus it now seems likely that the failure of one of the two cooling trains might well bring the temperature of the pool to more dangerous levels more quickly than would have been the case before the cascade plan. Or, to take other example, loss of on-site and off-site power might result in dangerously high temperatures more quickly than could have been the case before the modifications of the spent fuel pool. Therefore, Palmetto Alliance believes that the Applicant has not demonstrated compliance with: a) GDC 44, which requires that 'the system function shall be to transfer the combined heat load of these structures, systems, and components under normal operating and accident conditions.' b) GDC 61, which requires, among other things, that fuel storage and handling be designed with a residual heat removal capability having reliability and testability.' We believe that this capability has been seriously compromised. c) GDC 62, which mandates prevention of criticality in fuel storage and handling. [Palmetto Alliance Further Supplementary Responses, May 27, 1983 at pp 25-26]

As can be seen, the central thesis of the cooling capability aspect of Palmetto Alliance's contention (as set forth in its interrogatory responses) is

that the expansion of the Catawba spent fuel pools, and the alleged attendant rise in heat load, increase the alleged threat to public health and safety. Applicants make two observations with respect to Palmetto Alliance's thesis.

First, the design description set forth in the construction phase PSAR is not an issue in this case. See memorandum and Order of March 5, 1982 at pp 19-20. Rather, of relevance at the operating license stage is whether the design description set forth in the FSAR complies with regulatory guidance and does not pose a threat to the public health and safety. Accordingly, comparisons between past and present designs (i.e. reduced margin of error allegations) are irrelevant.

Second, Palmetto Alliance's interrogatory concern is unrelated to the presence of Oconee and/or McGuire spent fuel at Catawba (which, of course is the subject of the contention).^{2/} If Palmetto Alliance desired to pursue its concern that spent fuel pools of the size of Catawba pose a threat to public health and safety it should have raised a general spent fuel pool contention; it did not. Rather, Palmetto Alliance limited the contention to the alleged adverse safety implications associated with the storage of Oconee and McGuire spent fuel. It is on this narrow issue that we must focus.

With these observations in mind, Applicants turn to the cooling capability issue raised by the possible storage of Oconee and McGuire spent fuel at

^{2/} See Intervenors' June 6, 1983, Responses to Applicants' Follow-up Interrogatories on DES Contentions 11, 17, and 19 at p. 7 wherein Intervenors state:

P.A. and C.E.S.G. do not contend that there is any fundamental difference between Catawba spent fuel and Oconee/McGuire spent fuel such that one results in a greater heat load than the other.

Catawba, viz, whether Applicants have demonstrated compliance with GDC 44, 61 and 62. As set forth in the attached affidavit of A. L. Snow, Applicants maintain (citing references to the FSAR) that storage of Oconee and McGuire spent fuel at Catawba is consistent with regulatory guidance and in compliance with GDC 44 and 61.^{3/} (Applicants maintain that GDC 62 is not germane to the cooling capability concern.) The NRC Staff concurs. See SER Section 9.1.3. Palmetto Alliance argues otherwise. Palmetto Alliance's position is not based upon any alleged discrepancy in the FSAR or SER. Rather, Palmetto Alliance raises two independent reasons: "failure of one of the two cooling trains" and "loss of on-site and off-site power" can create situations wherein Applicants will not be in compliance with the GDC. However, even in these

^{3/} See Petition for Emergency and Remedial Actions, CLI-78-6, 7 NRC 400, 406-407 (1978) wherein it is stated:

General design criteria (GDC), as their name implies, are "intended to provide engineering goals rather than precise tests or methodologies by which reactor safety [can] be fully and satisfactorily gauged." Nader v. NRC, 513 F.2d 1045, 1052 (1975). They are cast in broad, general terms and constitute the minimum requirements for the principal design criteria of water-cooled nuclear power plants. There are a variety of methods for demonstrating compliance with GDC. Through regulatory guides, standard format and content guides for safety analysis reports, Standard Review Plan provisions, and Branch Technical Positions, license applicants are given guidance as to acceptable methods for implementing the general criteria. However, applicants are free to select other methods to achieve the same goal. If there is conformance with regulatory guides, there is likely to be compliance with the GDC. Even if there is nonconformance with the staff's guidance to licensees, the GDC may still be met. [Emphasis added.]

See also Metropolitan Edison Company, et al (Three Mile Island Nuclear Station, Unit No. 1), ALAB-698, ___ NRC ___ (October 22, 1982), slip op. at p. 14 wherein it is stated that:

In the absence of other evidence, adherence to regulatory guidance may be sufficient to demonstrate compliance with regulatory requirements.

instances Palmetto Alliance fails to assert any supporting facts, contrary to controlling case law.

On the otherhand, the affidavit of Mr. Snow states that under normal conditions, the failure of one train will not compromise the design temperature parameter; under abnormal conditions, consideration of failure of either train is inappropriate (i.e., violation of single failure criterion). See also, Standard Review Plan 9.1.3.III.1.d. With respect to Palmetto Alliance's loss of power scenario, such at bottom is premised upon the failure of the diesel generators to provide on-site power. However, this Board dismissed the allegation of loss of onsite power (i.e., the diesel generators) as "fatally vague." See December 1, 1982 Order at p. 5. Upon reconsideration of the issue, the Board stated:

In response now to specific objections to our rejections of Palmetto Contention 18 and CESG 17, we have once again (and for the last time) considered these two contentions and we conclude, once again, that they are not sufficiently specific.

Palmetto 18 alleges, in substance, that the plant's diesel generators do not meet sufficiently stringent safety standards, but no particulars are given. One is left to guess about what is allegedly wrong with this equipment. The Applicants' onsite power systems, including the diesel generators, are discussed at some length in Section 8.3 of the FSAR. The contention cites this section, but does not specify any alleged deficiencies in it. [February 2, 1982 Order at p. 2 (emphasis added)].

Palmetto Alliance's failure to provide the requisite specificity and basis regarding loss of power concerns cannot be cured in a backdoor fashion by permitting the subject be discussed under Contention 16. Accordingly, loss of onsite power is not an issue in this contention.

In sum, Palmetto Alliance has failed to provide any substantive support for its position that Applicants do not comply with GDC 44, 61 and 62. Accordingly, the contention should be dismissed.

In the event this Board seeks information concerning accidents, Mr. Snow's affidavit reveals that even in the event of total loss of electrical cooling

capability under maximum conditions (i.e., loss of onsite/offsite power), over 72 hours is provided before the top of the assemblies are uncovered. The NRC recognizes that 72 hours is a sufficient period of time to take corrective action. See, i.e., 10 CFR Part 50, Appendix R, Section III L. 5; FSAR Section 9.1.3.3.1. Further, Mr. Snow states that redundant sources of makeup water exist which are independent of a power source (i.e., they are gravity fed and controlled by manual valves). These sources are capable of providing sufficient cooling indefinitely. Lastly, the affidavit of Michael Green states that at temperatures in excess of 150°F (up to and including 212°F) the liner plate of the spent fuel pool will not rupture and therefore the function for which the liner was designed (i.e., leak tightness) will be maintained. Given these facts, even if the accidents postulated by Palmetto Alliance were to be considered (and they should not be), such do not pose a threat to the public health and safety. Under such circumstances there is nothing remaining of this aspect of Palmetto Alliance's Contention 16.

B. Cask Drop and Fuel Handling

1. Cask Drop

Palmetto Alliance's position with respect to its cask drop allegation is contained in two interrogatory responses. These responses are set forth below:

Palmetto Alliance is also concerned about the potential for spent fuel cask drop accidents both outside and into the spent fuel pool where the cask could crush spent fuel assemblies and threaten criticality in the crushed arrays. [Palmetto Alliance Supplementary Responses of April 19, 1983 at p. 52]

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As for the likelihood of cask drop accidents, the present uncertainty as to handling procedures, training, personnel and equipment contribute to the possibility of mishandling. Deposition testimony on May 12, 1983 of Design Engineer, Michael Green reflects that FSAR

figures fail to accurately portray the present cask handling crane range which now includes rails permitting transit of a cask directly over spent fuel. Applicants apparently planned to re-install mechanical stops to limit cranes range at some future point in time. Witnesses Tuckman and Green testified that cask drop-criticality analyses (assuming a postulated cask-drop-into-fuel-pool accident) had been performed at other Duke facilities but not at Catawba. Tuckman acknowledged that the McGuire design made such a cask drop accident sufficiently probable that such a criticality analysis was necessary. He contended that Catawba design alterations--specifically lowering the wall height between the de-contamination area and the fuel handling pit would prevent such an accident at Catawba. Such assurance has not been demonstrated.

Palmetto contends that the Applicants have not adequately demonstrated that they have met GDC 61's requirements for fuel storage and handling and radioactivity control nor have they demonstrated fulfillment of GDC 62 since the possibility of a cask dropping onto the fuel assemblies is a significant threat to the prevention of criticality in fuel storage and handling. GDC 62 requires that "Criticality in the fuel storage and handling system shall be prevented by physical systems or processes, preferably by use of geometrically safe configurations." [Palmetto Alliance Further Supplementary Responses, May 27, 1983 at pp 24-25].

At issue is a criticality event arising from the dropping of a cask into the spent fuel pool with attendant damage to the spent fuel assemblies. GDC 62 requires that criticality in such circumstances be prevented. As the affidavit of Michael Green states Applicants will comply with GDC 62.^{2/} Specifically, Applicants maintain that it is physically impossible for the cask to drop into the spent fuel pool. Applicants have performed an evaluation to assess the possibility of the cask entering the spent fuel pool. This evaluation, which is described in FSAR Section 9.1.2.3, concludes that it is not possible for the spent fuel cask to enter the fuel pool. The NRC Staff has reached a similar conclusion. See SER Section 9.1.5. Palmetto Alliance does not take issue with this evaluation except to say such assurance of the cask remaining out of the spent fuel pool "has not been demonstrated". Rather it contends that the cask

^{2/} Applicants' compliance with GDC 61 is discussed in the following section and in the affidavit of M. S. Tuckman at pp. 3-7.

handling crane rails extend over the spent fuel pool and thus when operational, the crane carrying a cask could traverse the spent fuel pool. Palmetto Alliance appears to be under the impression that uncertainty exists with respect to the range of the cask handling crane. To clear up any confusion, the original design called for the cask handling crane rails to stop short of the spent fuel pool area. However, during construction it was determined that the cask handling crane could be used to assist in the construction of the spent fuel pool. Accordingly, the rails were extended over the spent fuel pool area. However, prior to operation, mechanical stops will be in place which will physically prevent the cask from traversing the spent fuel pool area. See the affidavit of Michael C. Green; see also FSAR Section 9.1.4.2.3 and SER Section 9.1.5.

Aside from the cask rail example, Palmetto Alliance has been unable to specify any deficiency in Applicants' FSAR analysis or the NRC Staff's SER analysis. Absent such a showing, it cannot be said that a genuine issue of material fact exists and thus dismissal of this aspect of Contention 16 is warranted.

2. Fuel Handling

Palmetto Alliance's position with respect to its fuel handling allegation is contained in two interrogatory responses. These responses are set forth below:

Accidents involving mishandling of spent fuel casks including inadvertent unshielded removal of cask lids and cask drop accidents involving the cask handling crane are made much more likely by the massively increased volume of cask handling incidents required under Duke Power Company cascade plan. [Palmetto Alliance Supplementary Response, April 19, 1983 at p. 52]

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Palmetto contends that accidents involving mishandling of spent fuel casks including inadvertent unshielded removal of cask lids and cask drop accidents involving the cask handling crane are made much more likely by the massively increased volume of cask handling incidents required under the Duke Power Company cascade plan. As for the inadvertent removal of cask lids the May 12, 1983 deposition testimony of Catawba Technical Services Supervisor M. Tuckman reflects a present absence of any written procedure at the station for proper handling of non-Catawba spent fuel. While Mr. Tuckman admits that special training procedures for additional staff and supervision must be developed in order to handle the 300 shipments per year of non-Catawba spent fuel under the cascade plan, very limited information exists as to Applicant's cask handling plans. For example, he was unable to describe the specific procedures for cask lid removal or the configuration of the cask lid bolts and tools necessary for lid removal. Further, deposition testimony reflects that the 17 ft. long cask described in the FSAR cask drop accident figure would protrude some 2 ft. above the shielding water in the cask handling pit where the cask lid is to be removed!

Palmetto contends that the Applicants have not adequately demonstrated that they have met GDC 61 which requires that "the fuel storage, and handling, radioactive waste and other systems which may contain radioactivity shall be designed to assure adequate safety under normal and postulated accident conditions." These systems among other things, "shall be designed with suitable shielding for radiation protection." [Palmetto Alliance Further Supplementary Responses, May 27, 1983 at pp 23-24]

In essence, Palmetto Alliance alleges that GDC 61 has not been met because written procedures do not exist with respect to fuel handling regarding the inadvertent removal of spent fuel cask lids. See, Palmetto Alliance Further Supplementary Responses, May 27, 1983 at p. 41. As Applicants have stated in response to Palmetto Alliance's Follow-Up Interrogatory 2: "Procedures will be implemented to prevent premature removal of a spent fuel cask lid. Those procedures are not yet completed." Applicants' Responses of March 25, 1983 at p. 34.

Applicants submit that the simple lack of a procedure at this stage in the licensing process does not constitute grounds for a contention (particularly in light of the fact that it will be years, if ever, before fuel from Oconee and McGuire is received at Catawba). See Public Service Company of New Hampshire, et al. (Seabrook Station, Units 1 and 2), Memorandum and Order

of May 11, 1983, wherein the Licensing Board found that the fact that Applicants had not yet developed a system, but had committed to comply with the relevant regulatory guidance, warranted the dismissal of a contention. Slip op. at pp. 12-14. That Board appears to have placed emphasis on the fact that "[n]o evidence has been offered to cause the board to question the credibility of this commitment." Id. at p. 14.

This is the precise situation in the instant case. Applicants are confronted with no more than an allegation that procedures do not exist and thus that GDC 61 has not been met. This is plainly insufficient under Seabrook and the case law referenced in the attached Motion For Summary Disposition. As the affidavit of Michael Tuckman states, fuel handling procedures pertaining to spent fuel casks have been developed, and used by Duke at its other nuclear facilities. Similar procedures will be utilized at Catawba and are described in Mr. Tuckman's affidavit. Applicants informed Palmetto Alliance of this fact during depositions conducted on May 12, 1983; a description of the process of handling spent fuel was provided to Palmetto Alliance in Applicants' Response of September 27, 1982 at p. 21. Furthermore, the SER reflects, in Section 9.1.5., Applicants' commitment to meet the requirements of NUREG-0612 (concerning the safe handling of heavy loads), including measures dealing with safe load paths, procedures, operator training and crane inspections, testing, and maintenance.

Palmetto Alliance has failed to state why it believes Applicants will be unable to promulgate acceptable procedures. Moreover, Applicants maintain that Palmetto Alliance has failed to explain why procedures could not be promulgated at Catawba when similar procedures already exist at Oconee and McGuire. In the absence of such a showing, Palmetto Alliance's contention

must be dismissed, pursuant to referenced case law, for failure to set forth an issue deserving of consideration in an adjudicatory hearing.

C. Aircraft Crash

Palmetto Alliance's position with respect to its aircraft crash allegation is contained in two interrogatory responses. These responses are set forth below:

Palmetto is also concerned about the potential for such external threats to the facility as aircraft crashes from the nearby Douglas Airport to threaten public safety and health in the design construction and use of the Catawba pool to store cascaded spent fuel. [Palmetto Alliance Supplementary Responses, April 19, 1983 at p. 52]

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General Design Criterion 2 provides that "Structures, systems, and components important to safety shall be designed to withstand the effects of natural phenomena...without loss of capability to perform their safety functions." Palmetto Alliance believes that while possible aircraft crashes are not, strictly speaking, "natural" phenomena, they are nonetheless unpredictable external events that a defensible safety apparatus must take into consideration. Aircraft crashes may also come within the scope of GDC 4, which demands that the structures systems, and components important to safety "be appropriately protected against dynamic effects, including the effects of missiles, pipe whipping, and discharging fluids, that may result from equipment failures and from events and conditions outside the nuclear power unit." Palmetto believes it's important to note that the NRC Staff's conclusion that GDC 2 was met at Catawba was based on a consideration of the effects of earthquakes, flooding, and tornado missiles, but no mention was made of the nearby airport, its flight patterns or the capability of Catawba's safety systems for withstanding an airplane crash. [Palmetto Alliance's Further Supplementary Responses, May 27, 1983 at pp. 22-23]

The simple answer to this allegation is that consideration of aircraft accidents was raised by Palmetto Alliance on September 22, 1982 (DES 16) and rejected by the Board in its Memorandum and Order of December 1, 1982 at pp. 20-21. Accordingly, Applicants' view is that Palmetto Alliance is barred from raising this matter.

As to Palmetto Alliance's allegation that GDC 2 and 4 have not been complied with, Michael Green, in his affidavit, explains that aircraft crashes are not embraced within such GDC. However, Mr. Green goes on to state that Applicants' spent fuel pool design does satisfy GDC 2 and 4; the NRC Staff concurs. See SER Sections 9.1.2, 9.1.3, 9.1.4 and 9.1.5.

In any event, aircraft crashes are discussed in some detail in the FSAR at Sections 2.2.2.5 and 2.2.3.1.3. The SER concludes that the probability of an aircraft accident at the station causing radiological consequences in excess of the guidelines of 10 CFR 100 is less than about 10^{-7} per year.^{4/} See SER Section 2.2.2. Palmetto Alliance has failed to allege any error in such discussion or to provide any compelling reason why the Board should continue to address this matter. Under such circumstances this aspect of the contention should be dismissed.

IV. Conclusion

On the basis of the above discussion, Applicants maintain that Contention 16 should be dismissed.

^{4/} See Metropolitan Edison Company, et al. (Three Mile Island Nuclear Station, Unit No. 2), ALAB-486, 8 NRC 9, 25-26 (1978) wherein it is stated:

Finally, if the probability of a plane crash, or a crash of any particular class of planes (e.g., those weighing in excess of 200,000 pounds), can be shown to be less than 1×10^{-7} (i.e., less than once chance in 10 million) per year, such events are deemed by the staff to be of sufficiently low likelihood that their effects may be ignored, even though the consequences of such a crash may exceed those specified in 10 CFR Part 100. Standard Review Plan (NUREG-75/087), §3.5.1.6. [Footnote omitted]