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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of)
DUKE POWER COMPANY, et al.)
(Catawba Nuclear Station,)
Units 1 and 2))

Docket Nos. 50-413
50-414/OC

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OPPOSITION OF DUKE POWER COMPANY, ET AL. TO
"BRIEF OF APPELLANTS PALMETTO ALLIANCE AND
CAROLINA ENVIRONMENTAL STUDY GROUP"

J. Michael McGarry, III
Anne W. Cottingham
Mark S. Calvert
BISHOP, LIBERMAN, COOK,
PURCELL & REYNOLDS
1200 Seventeenth Street, N.W.
Washington, D.C. 20036

Albert V. Carr, Jr.
DUKE POWER COMPANY
P.O. Box 33189
Charlotte, North Carolina 28242

Attorneys for Duke Power
Company, et al.

February 13, 1985

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PDR ADOCK 05000413
G PDR

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I. INTRODUCTION

This case involves the Catawba Nuclear Station ("Catawba"), which consists of two pressurized water nuclear reactors located in York County, South Carolina. The joint owners of Catawba, Appellees before this Atomic Safety and Licensing Appeal Board ("Appeal Board"), include Duke Power Company, North Carolina Municipal Power Agency Number 1, North Carolina Electric Membership Corporation, and Saluda River Electric Cooperative, Incorporated (collectively referred to herein as "Duke" or "Licensee").

The evidentiary hearings for the Catawba operating license proceeding were conducted in three phases, with a separate Atomic Safety and Licensing Board ("Licensing Board") adjudicating all emergency planning issues. These hearings produced three Partial Initial Decisions ("PID"). See Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-84-24, 19 NRC 1418 (June 22, 1984)(resolving all safety and environmental issues except for two narrow safety issues); Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-84-37, 20 NRC 933 (Sept. 18, 1984)(resolving all emergency planning issues); Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-84-52, 20 NRC ____ (Nov. 27, 1984)(resolving the remaining deferred safety issue, denominated "foreman override").^{1/} Appellants Palmetto

^{1/} See section III.D.1, infra, regarding the disposition of the other deferred safety issue.

Alliance and Carolina Environmental Study Group ("Palmetto/CESG")^{2/} have appealed from all three of these PIDs, urging that they be reversed. Pursuant to 10 C.F.R. §2.762(c), Licensee files this brief in opposition to Palmetto/CESG's appeal.

II. BACKGROUND AND STATEMENT OF THE CASE

In response to the Federal Register notice of receipt of an application by Duke for operating licenses for the Catawba Nuclear Station (46 Fed. Reg. 32974)(June 25, 1981), five parties filed petitions to intervene. The Board admitted intervenors Palmetto Alliance, CESG, and another party which was subsequently dismissed from the proceeding in July, 1983, pursuant to a stipulation. The State of South Carolina was also admitted as an interested state pursuant to 10 C.F.R. §2.715(c). See Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-82-16, 15 NRC 566, 569 (1982).

During the course of this proceeding, Palmetto Alliance and CESG filed a total of ninety-five contentions, of which fourteen safety and environmental contentions and ten emergency planning contentions were admitted in some form for litigation. Following various pretrial rulings, four safety and environmental contentions and ten emergency planning contentions were actually litigated at the

^{2/} While initially admitted as separate parties, Palmetto/CESG have for all practical purposes performed as a single, consolidated intervenor in this proceeding.

hearings. Discovery was conducted during the thirty months between March 1982 and October 1984. Palmetto/CESG were given access to, and reviewed, thousands of Duke and NRC documents; they also took the depositions of more than fifty Duke employees and members of the NRC Staff. Five prehearing conferences were held, as well as numerous telephone conference calls. Voluminous pleadings were filed, including five interlocutory appeals, two of which went to the Commissioners of the NRC. Hearings commenced October 4, 1983; the record was finally closed at 12:19 a.m., October 13, 1984. Sixty-five days of hearings were held during that time, by far the majority of which were devoted to Palmetto's quality assurance contention. The bulk of the hearing time was consumed through cross-examination by Palmetto and CESG of Duke and NRC Staff witnesses. A total of 167 witnesses testified, producing a transcript of about 20,000 pages. More than 395 exhibits were admitted into evidence. All parties submitted extensive proposed findings of fact and conclusions of law, totalling more than 2400 pages.

The last of the three PIDs authorized issuance of a full power operating license for Catawba. LBP-84-52, slip op. at 42-43. On January 17, 1985, the Director of Nuclear Reactor Regulation issued a full power operating license for Catawba Unit 1. During the latter stages Palmetto/CESG made

six unsuccessful attempts before the Licensing Board, this Appeal Board, the Commission and the U.S. Court of Appeals to obtain stays of low power and full power operation of Unit 1.

As will be demonstrated below, the assertions of Palmetto/CESG that the Licensing Boards have committed reversible error are without merit. This operating license proceeding was anything but the "rush to judgment" that Palmetto/CESG claim. To the contrary, the three Licensing Board decisions were the product of a lengthy hearing process in which Palmetto/CESG were afforded a fair opportunity to litigate their claims. Palmetto/CESG fail to make the necessary showing that a reversal of any of these PIDs is warranted -- or, indeed, that there was any error on the part of either of the Licensing Boards. Palmetto/CESG's appeal should therefore be rejected.^{3/}

III. ARGUMENT

Palmetto/CESG allege four areas of error, none of which has merit. Palmetto/CESG's numerous "scattergun charges" of reversible error are presented in the most cursory form, largely unsupported by convincing record evidence or legal

^{3/} In responding to the points raised by Palmetto/CESG, we herein identify the allegation, set forth the appropriate Licensing Board findings, and where necessary, provide additional record citation to support the Licensing Board's findings. Because of the thorough nature of the Licensing Boards' discussion of the issues and their specific and detailed references to the record, independent discussion of the evidentiary basis for their findings is rarely necessary. However, when necessary, such has been provided.

analysis.^{4/} This approach, with its heavy reliance on innuendo and broad, generalized, unsupported assertions of wrongdoing by the licensee, is characteristic of that used throughout this proceeding by Palmetto/CESG. Moreover, many of their assertions tend to mischaracterize the record in this proceeding. See, for example, the discussion at pp. 7 and 24-25, infra.

- A. Palmetto/CESG have failed to demonstrate the existence of "pervasive flaws" in the Catawba QA program or "known but uncorrected workmanship defects" which would preclude the finding of "reasonable assurance" required for issuance of an operating license

Palmetto/CESG allege that there are basic quality assurance ("QA") defects at Catawba "of sufficient dimensions to raise legitimate doubt as to the overall integrity of the facility." Appellants' Brief (hereafter "App. Br.") at 6. Before discussing their specific allegations, however, it is important to focus on the central assertions made by Palmetto/CESG: that "serious violations of the Commission's [QA] regulations" have occurred; that "known yet uncorrected workmanship deficiencies" exist at Catawba; and that there has been a "systematic and willful circumvention" of QA requirements (App. Br. at 5). Much of Palmetto/CESG's argument is noticeably lacking in record citations,^{5/} and leads the

^{4/} See Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), ALAB-794, 20 NRC _____, slip. op. at 4 (Dec. 24, 1984). See also LBP-84-24, 19 NRC at 1498.

^{5/} This noticable lack of supporting citation for such
(footnote continued)

reader away from these assertions. Palmetto/CESG do so for good reason: the record clearly refutes their claims.

The record demonstrates, and the Licensing Board found, that none of the testimony presented "evidence[s] systematic deficiencies in plant construction or Company pressure to approve faulty workmanship such that the plant cannot operate without endangering the health and safety of the public." LBP-84-24, 19 NRC at 1584. To the contrary, the Board properly found, based upon all the evidence, that "on the whole, the Duke QA program at Catawba worked well" (id. at 1434); that "Duke did not deliberately condone substandard workmanship nor attempt to circumvent its QA program" (id. at 1439); that "there is no evidence that improper materials were actually installed" (id. at 1440); and that there was "no widespread effort to cut corners in order to meet cost and time schedules." Id. Thus the Board concluded that the record, far from demonstrating

(footnote continued from previous page)

assertions may result from the fact that the record simply does not support Palmetto/CESG's concerns of "systematic" quality assurance deficiencies at Catawba. Of the 167 witnesses who testified, many were QC welding inspectors or their first line supervisors, or welders or other craftsmen at Catawba, the very persons whose testimony Palmetto/CESG claim supports their assertions. Palmetto/CESG called, or sought to call them as witnesses. (Duke called the majority of these persons as its witnesses; it voluntarily made the rest available to testify to avoid the necessity of their being subpoenaed by Palmetto/CESG). Of those who testified, every one indicated that he had done his job properly and that the plant was safe. LBP-84-24, 19 NRC at 1505. It is against this backdrop that the facile assertions of Palmetto/CESG must be weighed and, ultimately, dismissed.

"systematic and willful" QA violations, or "known but uncorrected deficiencies," showed that those QA lapses (including allegations of harassment and retaliation) that had occurred were detected, did not result in deficient work, were isolated in nature, and had been corrected; and that accordingly they did not call into question the overall Catawba QA program. LBP-84-24, 19 NRC at 1434, 1504-05, 1519-20, 1530-32, 1583-84; LBP-84-52, slip op. at 41-42.^{6/}

Palmetto/CESG claim that the QA record "exhibits evidence rivaling in seriousness that in any reported licensing board decision" (App. Br. at 8), with no citation to either the Catawba record or any reported licensing board decisions. This is not only contrary to 10 C.F.R. §2.762(d)(1), but places the responding parties and the Appeal Board at a disadvantage in attempting to evaluate these spectres. Notwithstanding, the record in this case provides no basis for requiring a "comprehensive program to determine the quality of completed construction work" at Catawba (App. Br. at 21, 35). In reviewing the specific allegations of error, the Appeal Board should ask whether

^{6/} Palmetto/CESG's assertion that Duke has failed to meet its burden of proof in this licensing proceeding (App. Br. at 5) is unfounded. Not only do the three PIDs contradict this statement, but the record evidence supporting Duke's case is clearly sufficient. See LBP-84-24, 19 NRC at 1583-84; LBP-84-37, 20 NRC at 1007; LBP-84-52, slip op. at 41.

Palmetto/CESG's claim raises a serious QA violation or demonstrates that uncorrected workmanship deficiencies exist. In each instance the answer will be no.

We now discuss each of the specific allegations raised by Palmetto/CESG.^{7/}

1. Duke's QA Department possessed the necessary authority and organizational freedom

Palmetto/CESG allege that the QA program at Catawba lacked the required authority and organizational freedom, including independence from cost and scheduling pressure (App. Br. at 9).^{8/} The legality of Duke's organizational structure (App. Br. at 12-13) was litigated and approved by the Commission at the construction permit stage of this proceeding. See LBP-84-24, 19 NRC at 1458. Further, the Licensing Board properly rejected Palmetto/CESG's claim that "Duke did not take seriously its obligation to establish an independent QA program." Id. at 1459; see Apps. Exh. 2, Grier, pp. 8-9; Apps. Exh. 1, Owen, pp. 4-5; Tr. 2029-32, Owen (10/06/83). The record reflects that the Construction and QA Departments are headed by separate independent

^{7/} Palmetto/CESG's QA argument which challenges the adequacy of discovery on QA issues (App. Br. at 14-15, 25-29) is addressed in §III.B., infra.

^{8/} Palmetto/CESG apparently link harassment and retaliation against quality control ("QC") inspectors and the allegations of "foreman override" to this purported lack of QA independence (App. Br. at 9). Lacking any articulated connection among these issues, Duke discusses the QC inspector concerns in §III.A.3 and 4, infra, and the "foreman override" concerns in §III.A.6, infra.

managers who report to Mr. Warren H. Owen, Duke Executive Vice-President, Engineering, Construction, and Production Group. 19 NRC at 1459.^{9/} In response to Palmetto/CESG's complaint that this was improper, the Board agreed that responsibility for construction and for all other activities, including QA, must come together at some level of management. Id. It correctly rejected as inconsistent with 10 C.F.R. Part 50, Appendix B, Criterion I, Palmetto's position that there should be complete organizational independence for QA, since Criterion I provides that "the applicant shall be responsible" for QA. Id. This finding was also independently reached by the NRC's Director of Inspection and Enforcement. See Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), DD-84-16, 20 NRC 161, 171 (1984).

While the Board did express concern that until 1981 Duke's QC inspectors were located administratively in Duke's Construction Department but were functionally subject to the control of QA, it added:

We also believe, however, that the effect of the functional-administrative dichotomy on inspector performance cannot be quantified but probably was not very great. In any event, that very dichotomy had at least the implied blessing of this agency in the CP proceeding. LBP-75-34, supra, 1 NRC at 649, 650. In these circumstances, absent a

^{9/} Contrary to Palmetto/CESG's insinuations (App. Br. at 13), Duke fully complied with the McGuire Appeal Board's directive to appoint an independent QA manager. See LBP-84-24, 19 NRC at 1459.

showing that safety was compromised, a showing not made here, we can only regret that the dichotomy was not abolished earlier than it was.

LBP-84-24, 19 NRC at 1460.^{10/} The Board found no evidence support Palmetto/CESG's assertion that the structure of the Catawba QA program impeded QA welding inspectors from "performance of their assigned function" (App. Br. at 9), concluding

All of the welding inspectors and first-line supervisors who testified appeared very conscientious about doing a good job, were not dissuaded by perceived lack of management support on technical concerns, and were satisfied that the plant was built safely.

LBP-84-24, 19 NRC at 1505.^{11/}

Having heard and considered all of the evidence on these matters, the Board was in the best position to evaluate Palmetto/CESG's concern about the independence of the QA program. Had the Board believed that the previous division of administrative control over the QC inspectors compromised the effectiveness of the Catawba QA

^{10/} See also Duke Power Co. (William B. McGuire Nuclear Station, Units 1 & 2), ALAB-143, 6 AEC 623, 625 (1973) (approving QA structure); Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), ALAB-355, 4 NRC 397 (1976)(aff'g LBP-75-34); Duke Power Co. (Cherokee Nuclear Station, Units 1, 2, & 3), LBP-77-74, 6 NRC 1314, 1320 (1977), aff'd, ALAB-482, 7 NRC 979 (1978)(approving QA program).

^{11/} See Apps. Exh. 28, Deaton, p. 4, Tr. 5764, 5758, 5753, Deaton (11/03/83); Apps. Exh. 29, Burr, p. 7; Apps. Exh. 30, Bryant, pp. 5-7; Apps. Exh. 31, Rockholt, pp. 5, 7; Tr. 6397, Rockholt (11/08/83); Apps. Exh. 32, Cauthen, p. 7; Tr. 6404, 6408, 6575-76, Cauthen (11/08 and 09/83); Apps. Exh. 34, Ross, pp. 7-8; Tr. 7050-51, Ross (11/11/83); Apps. Exh. 56, Godfrey, p. 5; Apps. Exh. 57, Crisp, pp. 5-6; Apps. Exh. 58, Gantt, pp. 5-6; Apps. Exh. 61, Jackson, pp. 5-6; Apps. Exh. 67, Harris, p. 4; Apps. Exh. 68, Ledford, pp. 4-5.

program, it would have so stated in its decision. However, it found that "on the whole, the Duke QA program at Catawba worked well." Id. at 1434. Palmetto/CESG have provided no grounds for questioning the Board's decision on this issue.

2. The Licensing Board properly applied the Callaway standard in assessing Duke's QA Program

The standard for licensing boards to use in reviewing construction quality and QA programs was set out by the Appeal Board in Union Electric Co. (Callaway Plant, Unit 1), ALAB-740, 18 NRC 343, 345-47, pet. for reconsid. denied, ALAB-750, 18 NRC 1205, as modified, ALAB-750A, 18 NRC 1218 (1983). Palmetto/CESG's assertion that the Licensing Board incorrectly applied the Callaway standard^{12/} in finding reasonable assurance that Catawba can and will be safely operated (App. Br. at 10) is completely contradicted by the record, which shows that the Board, appropriately applying Callaway, found that construction/quality assurance lapses did occur but that they were isolated in nature and had been corrected by Duke. Thus they did not call into question the entire Catawba quality assurance program. See LBP-84-24, 19

^{12/} In Callaway, the Appeal Board recognized that in the construction of a nuclear power plant: (1) there will inevitably be construction defects; (2) there is no requirement that there be "zero defect" construction; and (3) even assuming all deficiencies are detected and corrected, there must be an inquiry into whether there has been a pervasive breakdown of quality assurance procedures such as to call into question the ability of the plant to operate safely. See ALAB-740, 18 NRC at 346; see also Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), ALAB-756, 18 NRC 1340, 1345 (1983).

NRC at 1433-34; see also id. at 1504-05, 1519-20, 1531-32, 1572, 1583-84. See 19 NRC at 1440 (where the Board discusses the appropriate standard for analysis of the significance of various construction deficiencies).^{13/} In sum, ample record evidence supports the Licensing Board's proper application of the Callaway standard.

3. There has been no adverse effect on plant quality or the QA Program from the few isolated incidents of harrassment or retaliation

Palmetto/CESG argue that QC inspectors^{14/} were subjected to "cost and schedule" pressures which impugned the independence of the QA program, resulting in harassment of inspectors and management retaliation against them for expressing concerns (App. Br. at 10-12, 17-21).^{15/}

^{13/} As an example of how the Licensing Board correctly handled its review of the QA issues, we point to the portions of the June 22, 1984 PID concerning alleged harassment of QA inspectors (id. at 1433-34, 1530-32) and alleged retaliation against one welding inspector supervisor. Id. at 1519-20. In these instances the Board focused on the implication that harassment and intimidation would have on the work force and found it to be minimal. The details of these incidents are discussed infra in section III.A.3 of this brief.

^{14/} Palmetto/CESG's statement that "Appeal Board and Commission intercession was required in order to obtain any access to [the Catawba QA welding inspector] witnesses" (App. Br. at 15) is inaccurate. Palmetto/CESG had access to these persons, among others, throughout discovery.

^{15/} Palmetto/CESG make much of the so-called "whistle blower" statutory and regulatory provisions (App. Br. at 10-11, 20-21). This argument and the cases cited by Palmetto/CESG, expanding the meaning of "protected activity" under the statute beyond what Congress intended, were specifically rejected by the most recent judicial construction of this "whistle blower" statute
(footnote continued)

Palmetto/CESG further assert that the Board "failed to grasp" the implications of these occurrences for the functioning of the QA program. The record does not support these claims.

The Licensing Board concluded that in the few incidents where it concluded harassment had occurred, faulty conditions did not go uncorrected, and measures were taken by Duke to improve working relations and reduce harassment. 19 NRC at 1530-31; see also Apps. Exh. 12, Att. 3, at 6-7, corrected at Tr. 3049, Alexander (10/13/83); Apps. Exh. 2, Grier, p. 54; Apps. Exh. 14, Davison, p. 35; Tr. 3139, 3541, 3597, Alexander (10/14 & 18/83); Apps. Exh. 24, Dick, pp. 7-9, 12-13; Tr. 5381, 5616-17, Dick (11/01 & 02/83); see note 11, supra. The Board correctly concluded that the evidence did not suggest a "programmatic" (App. Br. at 12) QA breakdown which would undermine a finding of reasonable assurance that the plant can be operated safely:

The dimensions of the harassment problem as we have defined it should be viewed in the context of the duration and magnitude of the Catawba project

(footnote continued from previous page)

42 U.S.C. §5851. See Brown & Root, Inc. v. Donovan, 747 F.2d 1029, 1036 (5th Cir. Dec. 10, 1984). Regardless, this issue is irrelevant to the issue before this the Appeal Board. Litigation alleging a violation of 42 U.S.C. §5851 is conducted before the Department of Labor. See 42 U.S.C. §5851(b). Review of the decision of the Director of the Office of Inspection and Enforcement whether to take enforcement action under 10 C.F.R. §50.7 is not a function of the Appeal Board. See 10 C.F.R. §2.785. In any event, no further proceedings are necessary, in that extensive evidence has already been taken on all allegations of harassment and retaliation. See LBP-84-24, 19 NRC at 1441-44, 1445, 1505-32, 1543-48.

-- some nine years of construction involving thousands of employees. In that perspective, the number of significant harassment incidents in this record is relatively small. As we noted previously [19 NRC at 1452-53; see also Apps. Exh. 14, Davison, pp. 6-7] the welding inspectors were asked to and did list virtually all of their concerns, including harassment concerns. Most of the welding inspectors had worked at Catawba for several years (a few of them from the inception of the project) and therefore it is reasonable to assume that they would have listed any harassment incidents that had become generally known among QA inspectors at the site. This was a vigorously contested case in which the parties offered all the strong evidence they could find. In these circumstances it seems reasonable to conclude that virtually all of the significant harassment incidents that have occurred at Catawba -- or at least all such incidents involving welding inspectors -- are in the record of this case. In any event, in the absence of any indication to the contrary, we can assume that correspondingly small numbers of harassment incidents have occurred in other major craft/inspection areas, e.g., concrete and electrical work. All of this indicates that harassment was not a widespread phenomenon at Catawba.

Id. at 1531-32 (emphasis added).^{16/} See also id. at 1444.

Palmetto/CESG seek to buttress their claim that welding inspector harassment and retaliation reflect a breakdown in QA by referring to the use of "black books," alleged

^{16/} The record reflects that Palmetto/CESG witness Ronald McAfee was an electrical QC inspector; he raised no harassment allegations. Further, only one of the in camera witnesses alleged harassment, and his concern was fully litigated, leaving the Board uncertain whether the alleged incident occurred at all. See LBP-84-24, 19 NRC at 1572-73; see also Apps. Exh. 101, Harris, pp. 1-2; IC Tr. 1076-79, 1092-94, Langley (12/16/83); Apps. Exh. 101, Mullinax, pp. 1-2; Apps. Exh. 99, Davison, p. 1. The only other present or former employee to testify on behalf of Palmetto/CESG and allege harassment was Nolan Hoopingarner. His assertions were thoroughly considered by the Licensing Board and found to be unpersuasive. Id. at 1543-48.

pressure not to contact the NRC, and the practice of verbally voiding certain inspection reports (App. Br. at 23-24). Regardless of whether some welding inspectors were keeping track of questioned welds in "black books," the inspectors came forward with all of their concerns. See LBP-84-24, 19 NRC at 1452-53; see also Apps. Exh. 14, Davison, pp. 6-7; Tr. 9290-9310 (12/02/83); Tr. 9782-84 (12/06/83).^{17/} The two alleged incidents of pressure not to go to the NRC are fully explained in their proper context by the Licensing Board and found not to present a problem. See 19 NRC at 1509-10.^{18/} After a thorough review of the record, the Board also concluded "verbal voiding" was not a problem.

^{17/} With regard to documenting concerns set forth in black books, the evidence reflects that this was an isolated matter. Tr. 9870, Van Doorn (12/06/83). In any event, the NRC Staff witness stated:

The program was being followed, the surveillances were being done. I had no reason to believe that significant problems identified during these random surveillances, or any other inspection activities, went uncorrected. That's the bottom line of the issue.

^{18/} See Apps. Exh. 14, Davison, pp. 2, 12-14; Tr. 3637-3701, 3710, Davison (10/18/83); Tr. 5936-37, 5881-82, Burr (11/03/83); Tr. 5766, Deaton (11/03/83); Tr. 8360, Crisp (11/29/83); see also Tr. 9392-95, 9401, Maxwell (12/02/83)(alleged "reprimand" by Mr. Davison); 19 NRC at 1510; Tr. 1995-96, 2010, 2023, 2262, Owen (10/06 & 07/83); Tr. 6397-98, Rockholt (11/08/83); Tr. 8778, Godfrey (11/28/83); Tr. 7014, 7068-71, Ross (11/11/83); see also Tr. 2014-17, Owen (10/06/83) (speech by Mr. Owen). See generally Tr. 2021-23, Owen (10/06/83); Apps. Exh. 24, Dick, p. 10; Apps. Exh. 37, Att. D; Tr. 2270-71, 2274, Grier, Owen (10/07/83); Staff Exh. 1; Tr. 2591, Grier (10/11/83); Tr. 9878-84, Van Doorn (12/06/83); Tr. 6173, Bryant (11/04/83); Tr. 6562, Cauthen (11/09/83); Tr. 8310, Godfrey (11/28/83).

Id. at 1481, 1483-92, 1504.^{19/}

As to retaliation, Palmetto/CESG assert that the low performance rating of Mr. Beau Ross had an adverse effect on the welding inspectors, and thus that they did not do their job properly. Palmetto/CESG also assert that this rating had adverse implications on QA inspectors beyond welding inspections (App. Br. at 18-20). The Licensing Board dealt squarely with this issue. See LBP-84-24, 19 NRC at 1518.

However, the Board further found:

Notwithstanding these observations, the evidence does not support a finding that Mr. Ross' performance of his work was negatively affected by the toll of these events on him. Mr. Ross himself stated that the inspection process was not compromised. Ross, Tr. 6965; App. Exh. 34, at 6, 7, 9. See also Rockholt, Tr. 6314-15; Cauthen, Tr. 6542. Despite the rating, Mr. Ross stated that the quality assurance program (and presumably his role in it) is 'going pretty much as it should.' Ross, App. Exh. 34, at 9.

Id. at 1519; see also Tr. 7047-49, 6819-20, 6971, 6977-78, 7003-04, Ross (11/11/83); Tr. 6028, Bryant (11/04/83); Tr. 4600-01, Davison (10/25/83). And, on considering the potential impact of Mr. Ross's negative evaluation on areas outside of welding inspection the Board stated:

^{19/} See also Apps. Exh. 2, Grier, pp. 41-43; Apps. Exh. 9, Wells, p. 13; Apps. Exh. 14, Davison, pp. 30-31; Apps Exh. 18, Morgan, pp. 8-9; Apps. Exh. 19, Shropshire, pp. 5-6; Apps Exh. 20, Baldwin, pp. 7-8; Apps. Exh. 21, Allum, p. 4; Tr. 9842-43, Van Doorn (12/06/83); Tr. 4994-95, Baldwin (11/27/83); Tr. 5894-95, 5954, Burr (11/03/83); Tr. 5822-23, Deaton (11/13/83); Tr. 6986-87, 7052, Ross (11/11/83); Tr. 6365-67, 6379, Rockholt (11/08/83); Tr. 6160-62, Bryant (11/04/83); Tr. 8559, Gantt (11/29/83).

[W]e further note that Mr. Ross was involved in only one part of the QA program at Catawba; we received no evidence of other similar discriminatory evaluations. Thus there is no direct evidence that the overall QA program at Catawba was adversely affected by Mr. Ross' evaluations.

Id. at 1520; see generally Tr. 6971, 7047-49, 7056-57, Ross (11/11/83); Tr. 6028, Bryant (11/04/83); Tr. 6314-16, Rockholt (11/08/83). Absent any evidence of an adverse impact on the QA program from Ross' low evaluation, there is no basis for further action by the Licensing Board as urged by Palmetto/CESG (App. Br. at 19-20).

Finally, Duke notes that Palmetto/CESG again attempt to make a point (App. Br. at 18) of the Licensing Board's finding, based solely on a memorandum to file written by Mr. Grier after a meeting with Mr. Ross (PA Exh. 33), that Duke's Corporate QA Manager, George Grier, "attempt[ed] to influence [Ross'] future testimony in this proceeding." 19 NRC at 1518. The record evidence is directly contrary to the Licensing Board's finding. Not only did Mr. Grier deny any improper intent to influence testimony (Tr. 3883-85 (10/19/83); 4206-07 (10/20/83)), but Mr. Ross himself testified that Mr. Grier had made no attempt whatsoever to influence his testimony. Tr. 7049-50 (11/11/83). Indeed, Mr. Ross stated that he felt that his meeting with Mr. Grier

was helpful. Tr. 6798-99 (11/10/83). The Licensing Board's contrary finding is unsupported by the evidence and should be reversed.^{20/}

4. The welding inspectors' technical concerns were properly resolved and do not indicate construction defects at Catawba

Palmetto/CESG assert that the testimony of Duke QC inspectors demonstrates that the quality of construction at Catawba is in question, because there is no reasonable assurance the QA program has detected deficiencies in safety-related components and systems (App. Br. at 9-10, 16, 21-25). There is simply no evidence in the record to support this assertion. To the contrary, the Board found that each of the QC welding inspectors who testified (and on whose testimony Palmetto/CESG rely) stated unequivocally that he had done his job properly and that he was satisfied that the plant was built safely. LBP-84-24, 19 NRC at 1505; see n.11 supra.

^{20/} The subject Licensing Board finding has been misconstrued and blown out of proportion by Palmetto/CESG, being cited prominently in various documents filed with the United States Court of Appeals and the NRC. See, e.g., Palmetto Alliance's June 27, 1984 petition (pursuant to 10 C.F.R. §2.206) to the Director of Inspection and Enforcement (attaching the relevant pages of the Licensing Board's June 22, 1984 PID); Palmetto/CESG's "Emergency Motion for Stay Pending Review," filed with the U.S. Court of Appeals for the District of Columbia Circuit at p. 13, Palmetto Alliance v. NRC, dkt. No. 84-1590, dated December 31, 1984). Duke therefore wishes to have this unsupported Licensing Board finding reversed.

Palmetto/CESG refer to specific Licensing Board findings of violation of QA requirements (App. Br. at 21-23) and assert that the Licensing Board dismissed the significance of these violations without further inquiry. This is not true. Standing alone, these violations do not necessarily imply any problem of safety significance. To assess their importance, the Board considered four factors: (1) the existence of violations, (2) the severity of the violations, (3) the pervasiveness of the violations, and (4) the safety significance of the violations. LBP-84-24, 19 NRC at 1460-61; 1498-99; 1504-05. And in its June 22, 1984 PID, the Board discussed each one of the violations which comprise Palmetto/CESG's list.^{21/} LBP-84-24, 19 NRC at 1460-1505. The Board properly determined that the

^{21/} Palmetto/CESG cite three specific matters to support their assertion. An examination of the record discloses that the Board properly concluded none of these matters raises a significant safety issue. First, Palmetto/CESG's newly-expressed concern over pitted containment dome plates (App. Br. at 22) was one of the "very few situations" where the Licensing Board concluded that Duke did not take prompt corrective action. See LBP-84-24, 19 NRC at 1505, 1493. The NRC resident inspector concluded, and the Board found, that Duke had undertaken adequate corrective action. Id. at 1493. Second, the concern about specification of weld size (App. Br. at 22-23) was adequately addressed and corrected by Duke through reinspection efforts. See 19 NRC at 1493-95. Third, the concern over socket weld fit-up gaps (App. Br. at 23) was also properly resolved. Duke submits that the required confirmation has occurred. 19 NRC at 1495-96. Significantly, the Board properly credited the NRC Resident Inspector's testimony about these three concerns (as well as others) that there are no significant technical discrepancies which have not been corrected or were not then being corrected. Id. at 1505.

violations were all of low severity, with none above Level IV.^{22/} (Levels IV and V are the two lowest levels of severity). LBP-84-24, 19 NRC at 1499; see Tr. 9938, 9942 (12/06/83). Furthermore, as noted above, the Board stated after this extensive examination that the violations were not pervasive, nor did they have safety significance. Id. at 1505.

In sum, the welding inspectors' technical concerns do not indicate a QA breakdown.

5. The 1981 SALP Report does not indicate a QA breakdown at Catawba

Palmetto/CESG cite the NRC's 1981 Systematic Assessment of Licensee Performance (SALP) report as evidence of serious QA flaws at Catawba (App. Br. at 13-14). However, the Licensing Board found that the 1981 SALP report, which had been based upon 1979-80 information, was "not entitled to very much weight, for several reasons." LBP-84-24, 19 NRC at 1457-58.

The Licensing Board found that "the authors of the SALP Report - the Staff - apparently no longer support the 'below average' rating; they now support the Applicants' QA program without significant reservation." Id. at 1457. The Licensing Board also found that "[t]his Board

^{22/} Palmetto/CESG seek to undercut this Board finding by alleging that the evidence reviewed by the Licensing Board was prepared by Duke and that the NRC Staff did not independently assess the matter (App. Br. at 15). This is simply wrong. The NRC Staff performed an independent review of the issues and reached conclusions not dissimilar from Duke and the Licensing Board. See LBP-84-24, 19 NRC at 1499; Staff Exh. 7, Van Doorn, pp. 16-20, 38, 41, 46-50.

and the parties, through the hearing process, have performed a far more thorough and critical review of the Catawba QA program than the Staff SALP review" (id. at 1457); that the "evidence adverse to the Applicants fairly derivable from [the] 1981 SALP [report] is far outweighed by other favorable evidence in the record." Id. at 1458. The Licensing Board further stated that in any attempt to compare Catawba with other plants, such as Zimmer, rated "below average" in that 1981 SALP Report, "[t]he factors bearing on such a comparison would be so diverse as to render it virtually useless." Id.

The 1981 SALP Report does not support Palmetto/CESG's claim that there has been a significant breakdown in QA at Catawba or that unsafe work resulted. Palmetto/CESG have provided no support for their assertion that the Board's ruling on the SALP report was incorrect.

6. The Licensing Board's resolution of the "Foreman Override" issue was correct, demonstrating reasonable assurance that Catawba is safe to operate

"Foreman override," defined by the Board as "situations where an employee is directed, either explicitly or implicitly, to violate established procedures" (LBP-84-52, slip op. at 6), constituted "one relatively narrow aspect of Palmetto Alliance's broad quality assurance contention." Id. at 2. The procedural history of this issue is aptly summarized in the Board's decision. See id. at 2-3.

Palmetto/CESG appeal two substantive issues^{23/} arising out of the Board's foreman override decision: the alleged prevalence of foreman override at Catawba and the sensitization of stainless steel welds (App. Br. at 29-33). The record evidence reveals that their arguments on both of these matters are unfounded.

a. Frequency of Foreman Override

The Licensing Board found:

Instances of foreman override at Catawba have been isolated; only one foreman has been involved in a pattern of foreman override; that foreman and his supervisor have been relieved of supervisory responsibilities.

LBP-84-52, slip op. at 41.^{24/} Significantly, none of the incidents of foreman override identified by the Licensing Board compromised the safety of the plant. See id. at 34, 39-40.

These finding followed the Licensing Board's detailed consideration of Palmetto/CESG's claim that twenty-three supervisors were implicated in foreman override. That consideration consisted, among other things, of analyzing the tables proffered by Palmetto/CESG to support their claim, including a review of each affidavit listed in

^{23/} Palmetto/CESG's procedural complaints, largely involving discovery, are discussed intra in Section III.B.

^{24/} Palmetto/CESG allege that the evidentiary basis upon which the Licensing Board relied was flawed because it is allegedly devoid of NRC Staff input (App. Br. at 31). This position is clearly unfounded. See LBP-84-52, slip op. at 7-9, 15.

Palmetto/CESG's Table 1 (beyond the thirteen foreman override incidents earlier discussed by the Board). The Board concluded that only five incidents could constitute foreman override, and they were all debatable, and specifically assigned reasons for rejecting the remainder. Id. at 32-33, 33, n.13.

Following its analysis, the Board agreed with the NRC Staff that the incidents in question "reflect involvement by only eight foremen (among hundreds at the site), and that five of the eight were involved in a single incident, with no indication of patterns of improper conduct." Id. at 33.^{25/}

Notwithstanding, Palmetto/CESG resurrect on appeal their claim of widespread foreman override. They focus much attention on Arlon Moore (App. Br. at 30-31), alleging that his performance was illustrative of alleged widespread foreman override.^{26/} Regarding the statements Welder B alleges were made by Arlon Moore (see App. Br. at 30-31), the record establishes two relevant facts that help put the

^{25/} Palmetto/CESG refer to the "posting of lookouts" as a practice condoned by foremen at Catawba, which allegedly would prevent QA inspectors from spontaneously reviewing work (App. Br. at 29-30). This allegation is essentially unfounded for the Licensing Board found that only once did this happen. LBP-84-52, slip op. at 19.

^{26/} It is important to note that Mr. Moore was identified by Duke, the NRC Staff, and the Licensing Board in their respective inquiries into foreman override (LBP-84-52, slip op. at 33-34, 8-9), and that Duke removed him from his supervisory position as a result of Duke's investigation. Id. at 33-34.

incident in its proper perspective. First, another individual present when Moore apparently made this statement did not view this incident as threatening. See Apps. Exh. 118, Ind. 32 (6/20/84). Second, in any event, Wolder B himself has stated his satisfaction with Duke's and the NRC Staff's resolution of the matter. See P.A. Exh. 146, App. A, Item 18 (8/10/84 Memo to File). Even Arlon Moore was shown to have been involved in only four separate incidents of foreman override during his four and one-half years as a foreman at Catawba. LBP-84-52, slip op. at 19; see also Apps. Exh. 118, Ind. 142, p. 1.

With no record citation, Palmetto/CESG characterize Duke's investigation of foreman override as "limited" and accuse the NRC Staff of improperly "delegat[ing] its investigative responsibility to Duke management to investigate its own wrongdoing" (App. Br. at 31). This is a misrepresentation of the record. First, the record clearly shows that the NRC Staff's investigation was independent and thorough. It involved, among other things, a total of 78 interviews with 53 different individuals at Catawba. See LBP-84-52, slip op. at 7-9. Though the NRC Staff did direct Duke to conduct its own independent investigation of foreman override, it closely monitored Duke's investigation and conducted an independent confirmation of many aspects of the inquiry. See Staff Exh. 33, pp. 4-6; Staff Exh. 36, p. 1;

Tr. 13848-50, 13853-56, 13865-66, 13913-14, Uryc, Blake (10/11/84); see also LBP-84-52, slip op. at 7-10, 15. Such is hardly the whitewash implied by Palmetto/CESG.

Second, Duke's investigation is described in its investigation report and prefiled testimony. This investigation included, among other things, interviews with approximately 217 workers at Catawba, many of whom were interviewed several times (see id. at 9-11), documented in approximately 300 affidavits (Apps. Exh. 118). This is not a "limited" investigation. See Apps. Exh. 116, pp. 7-12; Apps. Exh. 115, Hollins, pp. 1-6; see also LBP-84-52, slip op. at 9-11. Finally, the Board evaluated the investigation methodology described in Duke's report and concluded that it "was valid and an appropriate base for making generalizations and conclusions." Id. at 15-16. The Licensing Board properly rejected Palmetto/CESG's claims of alleged methodological flaws that are now raised on appeal (App. Br. at 32), based on the testimony of Duke's expert witness, Dr. Hunter, and based on the cross-examination of Palmetto/CESG's own witness, Dr. Michalowski. See LBP-82-52, slip op. at 11-16. Thus Palmetto/CESG's attack on the completeness of the various investigations of foreman override must fail. See also LBP-84-52, slip op. at 16-17.

With regard to Palmetto/CESG's allegation that the evidence implicates twenty-three of Duke's foremen in foreman override incidents (App. Br. at 31-32),

Palmetto/CESG assert that the Board "did not appear to dispute" this claim (id. at 31). As noted above, this allegation is unfounded.^{27/}

In an effort to counter the adverse finding of the Licensing Board, Palmetto/CESG invite the Appeal Board to "specifically consider" their proposed findings. Such an attempt to incorporate other pleadings by reference is impermissible. Public Service Electric & Gas Co. (Hope Creek Generating Station, Units 1 & 2), ALAB-394, 5 NRC 769, 770 (1977). In the event the Appeal Board wishes to explore the matter, despite the precedent cited above, because the parties' proposed findings on foreman override were filed concurrently, without an option for a reply (see Tr. 14369 (10/12/84)), Duke takes this opportunity to address the record evidence underlying Palmetto/CESG's allegations.

^{27/} After finding a total of thirteen incidents of foreman override, the Licensing Board did not eliminate "many" of Palmetto/CESG's alleged incidents for "lack of clear proof of their significance on this limited existing record" as Palmetto/CESG allege (App. Br. at 31). Rather, the Board appropriately rejected all but three of Palmetto/CESG's alleged incidents of foreman override for a variety of substantive reasons. See LBP-84-52, slip op. at 33, 33 n.13. Only three alleged incidents were rejected for lack of proof. See id. at 33. Rejection for lack of proof is appropriate in adversarial litigation. Rather than speculate about these three incidents, which Palmetto/CESG never probed by any direct testimony or cross examination, the Licensing Board properly credited the unshaken record testimony (e.g., Apps. Exh. 116) that there were only a few, isolated incidents of foreman override -- and these three incidents raised by Palmetto were not among them. See id. at 18-19.

The following summary points out the record evidence on each of the incidents in Palmetto/CESG's proposed findings of fact, Table 1. The incidents are grouped according to the reasons evident upon examination of the record. Some incidents are listed under more than one rationale.^{28/}

i. The thirteen foreman override incidents found by the Board:

- #27 "ignore red tag" - see PID at 19, incorporating SPFF ¶21; but cf. Rpt., Att. A, §IV.
- #31 "deceive ANI" - see PID at 22 ("isolated"); Rpt., Att. A, p. V-3.
- #33 "interpass" (same incident, #106) - see PID at 20-21, 19; but cf. Rpt. Att. A, pp. I-2, I-3 to I-5; PID at 35-36.^{29/}

^{28/} The various record citations are abbreviated in this discussion as follows: LBP-84-52, 20 NRC _____, slip op. (Nov. 27, 1984) ("PID"); Apps. Exh. 118 (the affidavits of code-numbered individuals) ("Aff. # "); Staff PFF ("SPFF"); Duke's Report to the NRC, Apps. Exh. 116 ("Rpt.").

^{29/} Duke did not and does not concede this as an incident involving foreman override. Contrary to the SPFF ¶21, incorporated by reference in the Board's PID, Duke did not dismiss this incident based on "speculation" that the weld had cooled sufficiently so that interpass temperature was not violated. See PID at 19; SPFF at 13 n.6. Instead, based on cooling tests that were not called into question during cross examination, Duke concluded that the interpass temperature physically could not have been violated in this instance. See Rpt., Att. A, pp. I-2, I-3 to I-5. Indeed, these tests are acknowledged by the Licensing Board. See PID at 35-36. Duke maintains on appeal that this incident does not involve foreman override, but rather is simply an example of an appropriate instruction by a foreman to "get back to work." See id.; Rpt., Att. A, pp. I-2, I-3 to I-5. Cf. Aff. #146 (welder attributing complaints about production pressure to a desire for "slack time" i.e., a rest break). Accordingly, the Appeal Board should clarify this inconsistency, and hold in conformity with the unimpeached technical evidence that this was not an incident of foreman override.

- #36 "interpass" - see PID at 20, 19, incorporating SPFF ¶¶23-26, 21; but cf. Rpt., Att. A at I-1, I-3 to I-4; Aff. #36 (4/17/84) at p. 2; Tr. 14017-18, 14231-32.^{30/}
- #70 "interpass [Moore]" - see PID at 20, incorporating SPFF ¶21; Rpt., Att. A at I-2.
- #72 "falsify stencil" (same incident, #177) - see PID at 23, 24 (isolated, no safety consequence); see also Rpt., Att. A, §VI.
- #94 "violate hold point" - see PID at 24 (isolated, no safety significance); Rpt., Att. A at V-2, V-3.
- #168 "lookout/foreman welds" - see PID at 19, incorporating SPFF ¶21, summarizing SPFF ¶44; Rpt., Att. A at II-1, II-2 to II-3.
- #196 "interpass [Moore #1]" - see PID at 20, incorporating SPFF ¶¶21, 24, 26; but cf. Rpt., Att. A, at I-2, I-3.
- #25 "lie about red-heads" - see PID at 21-22 ("trivial"); but cf. Rpt. Att. A at V-1, V-3.
- #88 "no process control [E. Cobb]" - see PID at 24-26 (process control nearby); but cf. Rpt. Att. A at III-1 to III-3.
- #95 "no process control" - see PID at 24-27 (process control nearby, only a technical violation of procedures); but cf. Rpt., Att. A at III-1.^{31/}

^{30/} For the same reasons given in the preceding footnote, Duke disputes on appeal that the interpass temperature was violated in this incident, based on Duke's cooling time tests. Duke asks the Appeal Board to find this incident not to be foreman override. See Rpt., Att. A, pp. I-1, I-3 to I-4; Aff. #36 (4/17/84), p. 2 ("I think [the weld] could have cooled" below the interpass temperature requirement); see also Tr. 14017-18 (10/11/84), 14231-32 (10/12/84).

^{31/} The thirteenth incident of foreman override found by the Board, involving individual #46 in a process control incident, was never proposed by Palmetto/CESG. It was erroneously found to be foreman override by the Board because the Board (and the NRC Staff, who
(footnote continued)

ii. Nonsafety. The Licensing Board properly declined to consider alleged incidents of foreman override involving work on nonsafety systems, as such are only remotely related, if not irrelevant, to nuclear safety issues. PID at 6, citing Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-788, 20 NRC _____, _____, slip op. at 68.

These incidents are:

- #13 "weld without purge" - see Aff. #13.
- #27 "ignore safety alarm" - see Aff. #27.
- #36 "violate bevel" (same incident, ##176, 208, 32) - see Rpt. at 24, item (4).
- #91 "i[nter]pass/falsify stencil" - see PID at 33 n.13; Rpt., Att. B, §XI (not interpass or stencil).
- #168 "lookout/foreman grinds" (same incident #196) and #196 "foreman grinds" - see PID at 33 n.13; Rpt. at 24, item (8); id., Att. A at II-1, II-2 to II-3.
- #209 "violate bevel fit" - see Aff. #209.
- #25 "expansion coils missing" (same incident #162) - see Rpt. at 24, item (3); Tr. 14079-81, 14072.
- #25 "misuse materials" (same incident #162) - see Aff. ##25, 162; Tr. 14079-81, 14072.

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proposed this finding) did not refer to the corrections to Duke's Report (Apps. Exh. 116) contained in Duke's prefiled testimony. See Rpt., Att. A, at III-1, as corrected in Apps. Exh. 15. Hollins, p. 5; Aff. #46 (no mention of involvement of a foreman; worker acted on his own); cf. PID at 24-27, incorporating SPFF ¶21. Duke asks the Appeal Board to correct this essentially clerical error by the Licensing Board, for no record evidence supports a finding that this incident involved foreman override.

- #162 "bad sump welds," "cheating on test," "violate fit," and "stealing materials" - see Tr. 14079-81, 14072; Rpt. at 23-24, items (2), (5), Att. B, §VIII.
- #118 "falsify cable paint" and "violate tie-down specs" - see PID at 33 n.13.
- #110 "foreman welds" - see PID at 33 n.13; Aff. #110 ("isolated incident").

iii. Incidents not substantiated by other workers

named:

- #27 "ignore safety alarm" - see Aff. ##72, 79.
- #66 "fit-up violation" - see Aff. #213.
- #173 "no process control" - see Aff. ##73, 174.
- #192 "interpass [no foreman]" - see Aff. #67; Rpt., Att. A at I-2, item (d).
- #196 "interpass [Moore #3]" - see PID at 20.
- #196 "no process control" - see Aff. #109; IC Tr. 2034-35 (10/12/84); Rpt. Att. A, p. III-1.
- #39 "no process control" - see Aff. ##77, 113.
- #88 "no process control [D. Williams]" - see Aff. #181; PID at 25, 26-27 (isolated and insignificant).

iv. Generalized statement; no specific incident:

- #28 "cut out too large" - see PID at 33 n.13.
- #58 "no process control" - see Aff. #58.
- #70 "interpass [Abernathy]" see Aff. #70 (7/26).
- #191 "interpass" - see Aff. #191.
- #192 "violate procedures [Moore]" - see Aff. #192 (4/2) at 1, (6/15) at 2 (Individual 192 states he did not violate procedures).

-- #192 "interpass [Baker]" - see Aff. #192 (4/2) at 1 (likely referring to welders' conservative practice of letting welds cool all the way to hand temperature (100^o) instead of 350^o; see, e.g., Rpt. at 16, Tr. 14232.

-- #32 "lookout" - see Aff. #32.

v. No foreman involvement alleged:

-- #28 "cut out too large"- see Aff. #28 (3/30) at 1.

-- #70 "lookout" - see PID at 33 n.13.

-- #168 "missing bolts on nut" - see Rpt., Att. B, §IX.

-- #180 "chill ring" - see PID at 33 n.13; Rpt., Att. B at X-1, X-2.

-- #191 "loose backing rings" - see Rpt., Att. B at X-2, X-3.

-- #25 "misuse materials" (possibly referring to baseplate painting) - see Rpt., Att. B, §XII.

-- #62 "coldspring" - see PID at 33 n.13.

vi. No procedural violation:

-- #226 "arc strike" - compare Aff. #226 with PID at 30.

-- #36 "excess penetration" - see Rpt., Att. B, §XIII.

-- #70 "interpass [Abernathy]" - see Aff. #70 (7/26).

-- #109 "foreman grinds arc stk." and "arc strike removals" - see PID at 30-32; Aff. #109 (6/19); Rpt., Att. B, pp. I-1 to I-3; IC Tr. 2059-60, 2034-40.

-- #114 "interpass" - see PID at 33 n.13; Tr. 13688-89.

-- #192 "violate procedures [Moore]" - see Aff. #192 (6/15) at 2) (did not violate procedures).

-- #192 "violate procedures [Best]" - see Aff. #192 (4/2) at 2, (6/15) at 1.

- #196 "interpass [Moore #2]" - see PID at 20, incorporating SPFF ¶¶26, 24; Rpt., Att. A at I-2.
- #196 "interpass [Moore #3]" - see PID at 20.
- #32 "interpass" and "welding speed contest" - see Aff. #32 (6/20).

vii. Bad decision, but not foreman override:

- #33 "coldspring" (same incident, ##228, 127, 131, 163, 120) - see PID at 27-29, 33 n.13; Rpt., Att. B, §III.

viii. Insufficient evidence to indicate foreman

override:

- #66 "fit-up violation" - see PID at 33.
- #20 "faulty weld" (same incident, #192) - see PID at 33; Rpt., Att. B, §XVII.
- #163 "coldspring [#2]" - see PID at 33; Rpt., Att. B, §III.

ix. No personal knowledge (based on rumor or hearsay):

- #66 "fit-up violation" - see PID at 33; Aff. #66.
- #76 "ignore red tag" - see Aff. #76.
- #173 "no process control" - see Aff. #173.
- #196 "foreman grinds" - see Aff. #196.
- #196 "interpass [Moore #3]" - see PID at 20.
- #196 "no process control" - see IC Tr. 2034-35; PID at 25; Rpt., Att. A, p. III-1.
- #39 "no process control" - see Aff. #39.
- #32 "interpass," "lookout," "work after NCI" - see Aff. #32.

x. Properly resolved within the QA program (detected and corrected in the course of work):

- #76 "ignore red tag" - see Aff. #76.
- #106 "faulty welds" - see Aff. #106.
- #186 "arc strike" - see PID at 31; Rpt. Att. B, pp. I-3 to I-4.
- #32 "welding speed contest" - see Aff. #32.
- #62 "coldspring" - see Aff. #62.

xi. Worker refused to follow foreman's directions and the foreman acceded:

- #94 "no process control" - see PID at 25; see also id. at 19, 26; Rpt., Att. A, §III.
- #77 "no process control" - see PID at 24-25; see also id. at 19, incorporating SPFF ¶21; Rpt., Att. A at III-1.
- #32 "work after NCI" - see Aff. #32.

xii. Worker's own supervision told him to follow procedures; worker has never sacrificed quality:

- #58 "no process control" - see Aff. #58.

xiii. Welder is not an engineer and is unqualified to question plant's designers' use of carbon steel (instead of stainless steel) angle imbeds:

- #76 "bad welds" - see Aff. #76.

xiv. Problem seems to be fault of the welder more than the result of any improper foreman pressure:

- #106 "faulty welds" - see Aff. #106 (6/15) at 1.

xv. No such incident appears in cited affidavit:

- #167 "work after NCI [H. Best]" - see Aff. #167.

b. The sensitization of some stainless steel welds

The Licensing Board evaluated the safety impact of any interpass temperature violations which might have occurred as a result of foreman override and correctly concluded that "[i]nstances of foreman override have not compromised plant safety." LBP-84-52, slip op. at 41. Palmetto/CESG appeal that finding, arguing that the 350^oF interpass temperature limit for welding stainless steel was violated because of foreman override; that defective welds resulted; and that such welds have gone uncorrected (App. Br. at 33-34). This allegation flatly misrepresents the record.

Not one of the witnesses who testified stated that there were any bad welds at Catawba. What the testimony does reflect is that some of the stainless steel welds in the primary coolant loop at Catawba are sensitized when evaluated in the field by ASTM A-262 Practice A. See LBP-84-52, slip op. at 36-37.^{32/} The metallurgical experts called by Duke

^{32/} When beginning their technical investigation into possible interpass temperature violations, Duke and the NRC Staff hoped to find a field test that would detect, after the fact, whether interpass temperature had indeed been violated on any given weld. Tr. 13900-01, Blake; Tr. 13444, Kruse. Toward this end, they employed ANSI/ASTM A-262 Practice A ("Practice A"), which is not a part of Duke's regular QA procedures. Tr. 13444, 13633-34, Kruse, Llewellyn; see Ints. Exh. 165. Practice A was not in fact usable to distinguish between welds made in conformity with interpass requirements and those made in violation of the procedure. Tr. 13444, 13505, Kruse; Tr. 13868-69, 13895-96, 13901, Blake; Tr. 13880, Czajkowski; Tr. 13906, Czajkowski, Economos. Thus there is no record evidence to support Palmetto/CESG's assumption (App. Br. at 33) that foreman override was the cause of
(footnote continued)

and NRC Staff testified repeatedly and without contradiction that Practice A is only an acceptance standard and that failure to meet its criteria (e.g., finding sensitization) does not mean that a weld is rejectable or defective or that it will fail in service or be unsafe. Tr. 13470, 13505, 13534-35 Kruse; Tr. 13867-68, 13890, 13898, 13900, Czajkowski. As explained by Mr. Czajkowski, "there are many welds in the field that are sensitized that never fail in service, that have never failed in service and that nobody expects to fail in service." Tr. 13,898 (10/11/84). In any event, the Licensing Board did not become embroiled in Practice A results, because Duke does not rely on Practice A evaluations to support its position that sensitization does not pose a problem at Catawba. LBP-84-52, slip op. at 38.

Sensitization is a concern to the extent it could cause a susceptibility to intergranular stress corrosion cracking ("IGSCC").^{33/} Id. at 35. Palmetto/CESG misrepresent the record when they assert that the Licensing Board "simply trusts" that IGSCC will not occur at Catawba (App. Br. at 33). On the contrary, uncontradicted expert testimony presented by Duke and the NRC Staff clearly establishes that sensitization will lead to IGSCC only if stress and a

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some sensitized welds that have been found at Catawba.
See also LBP-84-52, slip. op. at 36-37.

^{33/} IGSCC is the initiation and growth of cracks between the grains of metal when it is subjected to both stress and a corrosive environment.

sufficiently corrosive environment are also both present. Id. at 38-39. The record demonstrates, and the Licensing Board found, that regardless of the presence of sensitized welds, no such corrosive environment will exist at Catawba; thus no IGSCC will occur and the questioned welds will not fail in service. Id. at 39-40; Licensing Board's December 3, 1984 Order at 3.^{34/} Palmetto/CESG have failed to call into question the findings made by the Licensing Board in resolving the foreman override issue.

B. The Licensing Board's rulings on discovery matters, number of witnesses, and time allotted for cross-examination were both proper and fair (App. Br. at 35-46).

Palmetto/CESG allege that various Licensing Board rulings on discovery, on numbers of witnesses allowed to testify, and on time limits for cross-examination constitute reversible error. As demonstrated below, Palmetto/CESG have failed to demonstrate that the Board committed reversible error in any of the procedural rulings cited.

^{34/} The eight or so rare incidents of IGSCC in PWRs occurred in systems which are unlike those involved at Catawba. Those systems either were made of metals other than 304 stainless steel, or the systems contained corrodents not present at Catawba. Tr. 13612-13, Ferdon; Tr. 13846-47, 13891, 13908-09, 13918-21, Czajkowski; Tr. 13924-25, Blake. The IGSCC experience in BWRs about which Palmetto/CESG inquired is irrelevant to PWRs like Catawba. Tr. 13908, Czajkowski; see also LBP-84-52, slip op. at 40.

1. Application of the Commission's Statement of Policy

By way of overview, Duke submits that Palmetto/CESG have not demonstrated any error in the Board's application of the Commission's Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452 (1981). To the contrary, in numerous rulings the Licensing Board consistently adhered to the Commission's direction that boards should "manage and supervise all discovery" and "establish time frames" for the completion of discovery, in order to insure that the hearing process "moves along at an expeditious pace, consistent with the demands of fairness." 13 NRC 452, 453, 456. These rulings were consistently favorable to Palmetto/CESG, with respect to both their discovery obligations and the time extended them to fulfill those obligations.^{35/}

The Board did not "[dictate] the sacrifice of procedural protections for intervenors to satisfy the private interest of the utility" (App. Br. at 37). That the Board took into account Duke's schedule, among other factors, in making procedural decisions is entirely consistent with the Commission's Statement of Policy, CLI-81-8, 13 NRC at 453, and does not constitute "slavish deference" to Duke. See also 10 C.F.R. Part 2, Appendix A, sections V(4) and (5). The

^{35/} See, for example, the Board's discovery orders set forth in Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-82-116, 16 NRC 1937, 1938, 1940, 1947; (1982), see also Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-83-8A, 17 NRC 282, 286-289 (1983); Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-83-29A, 17 NRC 1121, 1122-23 (1983); June 13, 1983 Licensing Board Memorandum and Order (unpublished).

record simply does not support Palmetto/CESG's alarmist allegations that these procedural rulings "impermissibly hampered" their efforts to establish a pervasive pattern of QA violations. The mere fact that 50 days of hearings were spent on the QA issue alone (the bulk of which was devoted to cross-examination by Palmetto/CESG) serves to belie that assertion. Moreover, the Board afforded Palmetto/CESG ample opportunity to obtain information to support their contentions. Discovery on their QA contention was available for almost nine months (over a fifteen-month period). Palmetto/CESG were given an unusual "first right of discovery" against Applicants and Staff. (In granting this right, the Board admitted that it was "keenly aware of departing from the usual practice . . . and of creating a potential for undue delay." LBP-82-116, 16 NRC at 1945). They were given timely access to documents and information, and they were given multiple extensions of time to meet discovery deadlines.

In sum, none of the board's rulings compromised the Commission's directive that licensing hearings be conducted fairly and thoroughly, as well as expeditiously.^{36/}

^{36/} With regard to the Statement of Policy, Licensee disagrees with Palmetto/CESG's novel argument that this directive has "no application to Catawba" (App. Br. at 38). Had the NRC intended this Policy Statement to be applied only to those hearings that were then scheduled during the 24 month period following issuance of the Statement, it is reasonable to assume that the Policy Statement would have so stated, or would subsequently have been revoked. However, no such limitation is mentioned anywhere in this document; nor has the Policy
(footnote continued)

Palmetto/CESG have failed to provide a convincing rationale for reversing any of the Licensing Board's discovery rulings, which constitute matters "particularly with a trial board's competence. . ." Pennsylvania Power & Light Co. (Susquehanna Steam Electric Station, Units 1 and 2), ALAB-613, 12 NRC 317, 321 (1980).

2. Request for additional discovery on QA contention (App. Br. at 38-40).

By May 1983, Palmetto Alliance had been given almost nine months (over a fifteen month period) for formal discovery on the QA contention. Palmetto nevertheless filed a request for several additional months of unrestricted discovery. The Licensing Board ruled:

Discovery was open on [the QA] contention from December 1, 1982 until May 20, 1983.[^{37/}] Palmetto exercised its discovery rights through interrogatories and requests for production of documents to both the Applicants and the Staff. It served motions to compel on the Applicants relating to Contention 6, which the Board granted in substantial part. The nature and extent of these Palmetto discovery efforts are fully reflected in the record, and need not be repeated here.[^{38/}]

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Statement been revoked or even limited in its application since its issuance. Moreover, a review of the Statement of Policy confirms that its guidance is not by nature limited to those licensing proceedings which immediately followed TMI.

37/ Discovery was also open from March 5, 1982 until May 25, 1982.

38/ Palmetto was afforded a highly unusual "right of first discovery," against Duke and the NRC Staff. This meant that it was not required to furnish any answers to Duke's and the Staff's interrogatories until it had received their responses to two sets of its interrogatories plus supplemental responses ordered by the Board, and had been given access to discovery documents.

Suffice it to say that Palmetto engaged in broad-ranging discovery which produced a large volume of information and documents.

A certain amount of 'fishing expedition' discovery under a relatively broad contention like [the QA contention] is permissible during the initial phase of discovery. However, we have now completed two rounds of interrogatories and document requests under Contention 6, and Palmetto has foregone its opportunity for exploratory depositions on that contention. The time for 'fishing' is over.

June 13, 1983 Memorandum and Order at 2. ("June 13 Order").^{39/}

It was Palmetto/CESG's failure to demonstrate good cause for an unrestricted extension of time, rather than the Board's "commitment to complete licensing prior to Duke's anticipated construction completion" (App. Br. at 42) that led the Board to deny Palmetto's broad request for an extension of discovery. See June 13 Order at 4. For example, Palmetto/CESG took no depositions until the final three weeks of discovery, despite being advised repeatedly by the Board to do so earlier. See LBP-82-116, 16 NRC at 1949; February 9, 1983 Memorandum and Order at 6, 12; April 18, 1983 Memorandum and Order at 3. However, with respect to welding, Palmetto was found to have shown good cause and allowed an extension of time from June 20 until July 15, 1983 to conduct

^{39/} With respect to the allegedly "extreme dilatory discovery tactics engaged in by Applicants and the NRC" (App. Br. at 39), Duke submits that this accusation is refuted by the record. See the Licensing Board's May 13, 1983 Memorandum and Order (Ruling on Applicants' Motion to Compel) (unpublished) at 1-4; Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-83-29A, 17 NRC 1121, 1723-28 (1983).

depositions.^{40/} During that time it conducted more than 20 depositions of Duke and NRC Staff personnel. Duke submits that the Board's ruling was clearly proper -- and, under the circumstances, generous. Palmetto/CESG have failed to demonstrate any reversible error in this ruling. As the

^{40/} Palmetto/CESG cite selectively the Board's June 13, 1983 Order in an apparent attempt to suggest that Duke and the NRC Staff withheld discoverable documents. This is not the case. What the Board actually said was as follows:

We also note that although the welding documents were not asked for specifically in Palmetto's first round of interrogatories, it appears to the Board that these documents might have been transmitted to Palmetto earlier than they were, if the Applicants and Staff had been interested in disclosing matters of obvious relevance to Contention 6 early in discovery.

June 13 Order at 6. (emphasis added)

Duke disputed at the time, and continues to dispute, the Licensing Board's inference that Duke was somehow remiss in not "disclosing matters of obvious relevance to Contention 6 [e.g., the Welding Inspector Task Force Report] early in discovery."

The underlying facts clearly disclose that Palmetto was on notice of the Task Force Report in September of 1982; that the document was identified to Palmetto by Duke in December of 1982; that the document was available for inspection and copying by Palmetto in mid-February of 1983; that the document was described to Palmetto Alliance later in February of 1983; and that Palmetto did not request a copy of that document until mid-March of 1983. The facts also show that during this time Palmetto made only two trips to the Duke document room to inspect documents and designate them for copying. (See "Applicants Response In Opposition to Palmetto Alliance's Motion to Establish Discovery Schedule On Its Quality Assurance Contention 6," June 1, 1983, at pp. 2, 13-14, 20-26).

The Licensing Board apparently believed that it was the responsibility of Duke somehow to determine which of the documents identified in its responses to Palmetto's

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Appeal Board has recognized, "to establish reversible error arising from curtailment of discovery procedures, a party must demonstrate that the action made it impossible to obtain crucial evidence, and implicit in such showing is proof that more diligent discovery was impossible." Northern Indiana Public Service Co. (Bailly Generating Station, Nuclear 1), ALAB-303, 2 NRC 858, 869 (1975)[citation omitted]. No such demonstration has been made on any of Palmetto/CESG's discovery complaints.

3. Discovery request on INPO Report (App. Br. at 40-42)

During a September 9, 1983 transcribed conference call, Palmetto made an oral motion that discovery on the QA Contention be "reopened" to permit inquiry into several issues which were not, at that time, within the scope of the admitted contention, including Duke's 1982 "Self-Initiated Evaluation" for Catawba (the "INPO Report"). Tr. 1299-1323 (9/9/83). Palmetto did not specify either the scope or the duration of the discovery it sought.^{41/}

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interrogatories Palmetto would be most interested in, and call them to their attention. Duke has no such obligation. Its only obligation is to identify documents and make them available for inspection and copying. See Boston Edison Co. (Pilgrim Nuclear Generating Station, Unit 2), LBP-75-30, 1 NRC 579, 588 (1975),

^{41/} According to NRC accession lists, the Report was forwarded to the Rock Hill, S.C. local Public Document Room on May 5, 1983; a copy was placed in the NRC Public Document Room in Washington, D.C. on May 20, 1983. There were also references to this Report in other discovery documents made available to Palmetto/CESG as early as March 1983. However,
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On November 4, 1983, the Board ruled that the only aspect of Palmetto's motion that "warrant[ed] further consideration" was that which relied on the INPO Report. Tr. 5977 (11/4/83).^{42/} To assess the significance of the findings of the INPO Report, the Board announced that it wished to question a panel comprised of some of the Duke and TVA employees who had authored the Report before ruling on Palmetto's motion, because it could not determine by simply reading the report whether it furnished good cause for reopening discovery on QA issues. Tr. 5979-82, (11/4/83). The Board discussed with the parties those aspects of the INPO report which should be addressed by the witness panel and which of the report's authors should appear on the panel. Tr. 6914-16 (11/11/83); 7635-50 (11/17/83); 8604-8616 (11/29/83); 8946-48 (12/01/83).

The testimony of this panel was subsequently heard, not for evidentiary purposes, but solely to provide the Board with additional information and perspective on the INPO

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since Palmetto/CESG did not request the Report itself during discovery, it was not provided until September 6, 1983.

^{42/} The Board tentatively concluded that the INPO Report should have been provided earlier in discovery since, in the Board's view, portions of it were relevant to the QA contention. Tr. 5978 (11/4/83). The Board acknowledged, however, that Palmetto had not asked for the Report. Id. Similar to n.40 supra, Duke does not believe that it should be penalized for Palmetto/CESG's failure to properly pursue discovery (in this instance a failure to request a relevant document). Accordingly, the instant discovery request should have been denied on the basis of timeliness in that discovery closed in May, 1983.

Report so that it could make a more informed ruling on Palmetto's discovery request. See Tr. 8949 (12/01/83); 10,044 (12/7/83). Palmetto's suggestions as to the composition of the witness panel and the substantive areas of inquiry were accepted by the Board. Tr. 8610-16 (11/29/83); 8946-47 (12/01/83); IC Tr. 474-75 (12/02/83). In this regard, Palmetto/CESG's complaint that there was "no prior opportunity for Palmetto to review any of the underlying technical evidence available alone to Duke" (App. Br. at 41) before the panel testified is totally specious, suggesting as it does that they should have been allowed to conduct discovery in order to prepare for the hearing to determine whether they would be allowed to conduct discovery on this document. Moreover, Palmetto/CESG had had the Report itself since early September. Similarly, Palmetto/CESG's claim that they were given "only the most truncated opportunity . . . to ask summary questions" of the panel (id.) is without merit; Palmetto was allowed to cross-examine the panel and its questions produced almost seventy pages of transcript. Tr. 10,162-229 (12/7/83). This cannot reasonably be characterized as an abuse of the Board's discretion.

After hearing the panel's testimony, which consumed one full day of trial, the Board denied Palmetto's request, stating that it found "no good cause for further discovery based on the INPO report and the panel presentation." IC Tr. 948-51 (12/16/83).^{43/} The Board added:

We were looking for whether there was good cause to look further [into the INPO Report]. We were looking for the significance of the report in a broad sense.

In the context of that good cause inquiry the great weight of what the panel had to say was favorable to the Catawba QA program. We thought it particularly significant that no panel member thought there had been any systematic breakdown in QA at Catawba.

We think the panel's statements dispel our earlier doubts.

IC Tr. 950 (12/16/83).^{44/}

^{43/} A separately paginated in camera transcript (cited as "IC Tr.") was compiled for hearing confidential Board witnesses. Occasionally procedural rulings unrelated to the in camera proceedings were made during in camera sessions.

^{44/} This ruling is consistent with NRC case law holding that "a higher standard of probative value" -- in particular, "a showing of good cause" -- is required for the production of documents after the discovery period has closed. Toledo Edison Co., et al. (Davis Besse Nuclear Power Station, Units 1, 2 & 3), LBP-76-8, 3 NRC 199, 201-2 (1976). It is also consistent, by analogy, with rulings on the reopening of the record, which require a showing of timeliness, of safety or environmental significance and of a matter sufficiently material to have changed the initial result. See Deukmejian v. NRC, No. 81-2034, slip op. at 56-57 (D.C. Cir. Dec. 31, 1984). See also Pacific Gas & Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 & 2), ALAB-756, 18 NRC 1340, 1344 (1983).

That the Board carefully and thoroughly considered Palmetto's discovery request on this matter is apparent from its willingness to devote an entire day of hearing time to questioning witnesses on the document which was the subject of the request. Its result was sound and should not be disturbed.

4. Request for formal discovery on In Camera issues (App. Br. at 25-26, 42-43)

A review of the record underscores the propriety and fairness of the Board's denial of Palmetto's request for formal discovery on the in camera concerns. The technical and QA concerns eventually denominated as "in camera" concerns were first raised in an August 3, 1983 conference call, wherein Palmetto Alliance alleged that unnamed persons had brought to its attention serious plant deficiencies in addition to those being litigated. Duke sought an immediate identification of the persons and the alleged deficiencies; however, Palmetto Alliance refused to reveal the information, even in response to the Board's order requiring it to do so. See September 14, 1983 Licensing Board Order at 6-8.

On October 11-12, 1983, during the hearings, Palmetto reiterated that there were unnamed Duke Power Company employees with information on the QA contention who wished to come forward but feared retaliation. The Licensing Board therefore created a procedure whereby present and former Duke employees were notified of the availability of an in camera proceeding in which any such concerns could be raised in

confidence. In response to the Board's invitation, four former Duke employees expressed a desire to come forward. See LBP-84-24, 19 NRC at 1428-31.

After considerable discussion, the Board and parties agreed upon a procedure for receiving the testimony of the in camera witnesses and the parties' responses to it. This procedure was as follows: during special hearing sessions on November 8-10, 1983, the in camera witnesses presented all of their concerns, and were questioned by counsel for all parties, to provide sufficient information for the parties to begin investigating the concerns. IC Tr. 40 (11/08/83). The parties next moved to strike various portions of this testimony, leaving the unstruck portions as, in effect, the prefiled testimony of the in camera witnesses. IC Tr. 379 (11/16/83); IC Tr. 397-424 (11/28/83); Tr. 9180, 9186-95 (12/02/83). On November 16, 1983, the Board set December 13 as the filing date for prefiled testimony in response to these concerns, and December 14-16, 1983 as the dates for hearing testimony. IC Tr. 379-88 (11/16/83). On December 8 and 9, 1983, the Licensing Board issued the last of its rulings on the motions to strike, thus finalizing which of the concerns raised remained issues for litigation.

Palmetto/CESG's assertion that it sought "formal or informal" discovery on the in camera issues "[p]romptly upon Licensing Board admission of these issues in litigation on December 13, [1983]" (App. Br. at 42) seriously misrepresents

the record. As indicated above, the in camera issues were not "admitted" on December 13. Several discussions on procedural matters, including discovery, were held during the month of November, 1983, with the Board clearly indicating its desire to "avoid formal discovery just for logistical, cumbersome reasons." IC Tr. 13 (11/3/83). See also IC Tr. 43 (11/8/83). Palmetto did not ask for formal or informal discovery during these discussions. Id. Nor did Palmetto ask for discovery of any matters when the testimony of the last of the in camera witnesses was heard on November 10, 1983 (Tr. 6832-6902 (11/10/83)); or when the parties discussed the procedure for striking parts of this testimony on November 16, 1983 (IC Tr. 379-86); or when the parties subsequently moved to strike parts of the in camera witnesses' testimony (IC Tr. 395-442 (11/28-11/29/83), 476-81 (12/8/83); or on December 2, 1983, when Palmetto opposed striking any of the testimony (IC Tr. 443-65, Tr. 9167-85, 9195 (12/02/83)); or on December 8 or 9, when the Board ruled upon motions to strike the testimony (IC Tr. 476-93 (12/08/83)); IC Tr. 510-14 (12/09/83); or on December 12, 1983, when Duke filed prefiled testimony.

As Palmetto/CESG acknowledge (App. Br. at 42), they did not seek either informal or formal discovery until December 13, 1983, the day before the established hearing date for the parties to respond to the in camera witnesses' allegations. The Licensing Board denied Palmetto's untimely motion for

discovery on the same day, noting the extreme tardiness of the request, the prior availability of informal discovery,^{45/} the fact that these were Board witnesses, Palmetto's overall failure to demonstrate good cause, and the fact that formal discovery was not necessary for an adequate exploration of the concerns. Tr. 11,217-21 (12/13/83). See also LBP-84-24, 19 NRC at 1431-32, wherein the Board again explained its ruling. Palmetto/CESG's petition for directed certification to the Appeal Board on this ruling was rejected for its "manifest" lack of merit. January 30, 1984 Appeal Board Memorandum and Order, slip op. at 2. Palmetto/CESG have failed to demonstrate any error in the Board's ruling.

5. Discovery on Foreman Override Concerns (App. Br. at 43-44)

The record does not support Palmetto/CESG's inference (App. Br. at 43) that the Board's discovery rulings on foreman override were unfair. On September 17, 1984, the Licensing Board heard during a conference call Palmetto's request for discovery and a hearing on foreman override concerns. On September 21, 1984, the Board granted Palmetto's request in another conference call and proposed a tentative schedule for the conduct of discovery, pretrial preparation, and holding a hearing. All parties were given

^{45/} The record reflects that when Palmetto/CESG sought informal discovery in preparation for the continued in camera hearings held on January 30-31, 1984, Duke provided them with the documents requested. Tr. 11,939-40; 11,984; 12,028-29 (1/30/84).

an opportunity to comment on and object to the proposed schedule. Tr. 12,845; 12,848 (9/21/83). As the Board subsequently pointed out (Tr. 13,085 (10/9/84)), Palmetto Alliance raised no objection at that time. Nor did it complain about the discovery schedule during a conference call on September 25, 1984, or during the two conference calls on September 28, 1984.^{46/} Indeed, Palmetto did not request additional time for discovery until after the hearing began October 9, 1984, which certainly was not, as Palmetto/CESG claim, "at the very earliest opportunity." See Tr. 13,085-87; LBP-84-52, slip op. at 1-5.

It is important to recognize that discovery opportunities on foreman override did not begin on September 21, 1984, as implied. To the contrary, as Palmetto/CESG acknowledge (App. Br. at 42), the issue was first raised before the Board and parties by Board witness Howard Samuel Nunn, Jr. during the in camera hearing sessions in November-December, 1983. Mr. Nunn was represented during the December 1983 in camera hearing sessions and the October 1984 hearings by counsel for Palmetto Alliance. See IC Tr. 602-03. It is

^{46/} During the time between September 24 and the commencement of the foreman override hearing on October 9, 1984, Palmetto/CESG participated fully in discovery, reviewing numerous Duke and NRC documents and conducting more than 15 depositions of Duke and NRC Staff personnel.

With respect to their claim that Duke had "suppressed" evidence of Duke's field test welds (App. Br. at 29), such is in error. See Tr. 13476-79; 13509; 13678-80; 13529-30; Tr. 13693-96, 13700-01; 13865-69; Staff Exh. 32.

not unreasonable to assume that Palmetto Alliance had access to Mr. Nunn and to the other Board witnesses even earlier than December, 1983, since the in camera witnesses were initially represented by GAP, which has worked closely with Palmetto in this proceeding and has stated that it is assisting Palmetto.^{47/} See DD-84-16, 20 NRC at 162. In any event, nothing prevented Palmetto from investigating foreman override at a substantially earlier date, particularly in view of the fact that as early as August 1983, counsel for Palmetto was asserting that he was in contact with a number of unnamed Duke employees and former employees with safety concerns.^{48/}

6. Limits on time for cross-examination and numbers of witnesses (App. Br. at 44-46)

A review of the record disproves Palmetto/CESG's claim that the Board imposed "arbitrary" and unfair limits upon the number of witnesses they were allowed to call. With respect to their claim that they were allowed "to present only five affidavits" (App. Br. at 44) at the foreman override hearing, Duke notes that at the beginning of that hearing Palmetto/CESG sought subpoenas for approximately sixty

^{47/} Counsel for Palmetto and GAP representatives were present, in the capacity of representing the in camera witnesses, at the November 8-10, 1983 in camera sessions. E.g., Tr. 6830 (11/10/83).

^{48/} In addition to Palmetto's longstanding accessibility to Mr. Nunn, the NRC Inspection Reports dealing with foreman override were available beginning January 31, 1984. Duke's report on this issue was distributed August 3, 1984, and the Staff's report was served August 28, 1984.

prospective witnesses. In response, the Board suggested that Palmetto/CESG choose the twelve to fifteen "best witnesses" for its case and the Board "would hear as many of those as we can hear" (Tr. 13,085-86; see also (Tr. 13, 077 (10/09/84)), indicating that this number would be sufficient to substantiate Palmetto/CESG's claims if the witnesses "substantially shook the Applicants' presentation . . ." Tr. 13,086; see also Tr. 13,306-08 (10/09/84), Tr. 13,329-30, 13,337 (10/10/84). Palmetto/CESG eventually narrowed their list to seventeen witnesses. Tr. 13,483-84 (10/10/84).

To facilitate this goal of hearing up to fifteen Palmetto/CESG witnesses, the Board several times urged counsel for Palmetto to "[make] judgments about how you want to spend your time," and suggested that he complete his cross-examination of Duke's and the NRC's witness panels by the end of the second hearing day. Tr. 13,163-64; 13,306 (10/09/84). See also IC Tr. 2008 (10/11/84). However counsel for Palmetto did not complete this cross-examination until mid-afternoon of the third day. Palmetto/CESG then chose to spend time on a direct examination of their witness, Dr. Michalowski. See Tr. 13,927 (10/11/84). Palmetto/CESG then called six of the identified seventeen witnesses who were among the 217 employee affiants.^{49/} Palmetto/CESG chose to

^{49/} See Tr. 14,006, Ind. 36 (10/11/84); IC Tr. 2014, Ind. 196; Tr. 14070, Ind. 162; Tr. 14,094, Ind. 131; Tr. 14,148, Ind. 25; IC Tr. 2098, Ind. 31 (10/12/84). One of these six witnesses was excused after limited testimony because his concerns did not involve work on
(footnote continued)

spend the rest of their available time examining one (of the several) Catawba QA personnel on their witness list, Mr. Davison (Tr. 14237 (10/12/84)), and Mr. Howard S. Nunn (Tr. 14257 (10/12/84)), neither of whom were among the 217 affiants. Thus a total of nine intervenor witnesses were called, of whom only five testified on safety-related equipment. That Palmetto/CESG failed to allot their hearing time as effectively as they might have was not the result of any unfair limitations set by the Board.^{50/}

Palmetto/CESG's argument that the Board also imposed unfair time and witness limits during the 1983 hearings is equally unpersuasive. With respect to the single example cited -- the cross-examination of QA inspector John Bryant -- Duke notes that in fact counsel for Palmetto questioned Mr. Bryant for approximately four hours. See Tr. 5988-6172; 6179 (11/04/83); see also LBP-84-24, 19 NRC at 1427 n.5. With respect to Palmetto/CESG's complaint that they were permitted to cross-examine only fifteen out of thirty-five potential welding inspector/supervisor witnesses, the Board explained:

As matters developed, the parties stipulated to a list of nine "important" witnesses (from among the thirty-five names), six of whom were considered

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safety-related systems. Tr. 14072, 14079-81, Ind. 162 (10/12/84).

^{50/} On the contrary, Palmetto/CESG's "problem" seems to be of their own making, and, indeed, the product of their own announced litigation strategy: "frankly, we think that we can make [our case] based on the affidavits themselves [Apps. Exh. 118] We don't have to put up a single witness to make our case." Tr. 13660 (10/12/84).

more "important" than the other three. Tr. 5707-16. We actually spent about six days . . . in questioning those six witnesses, most of it on cross-examination by Palmetto Alliance. We then spent about three more hearing days . . . on nine more welding inspectors/supervisors, for a total of nine days on that category of witness.

Id. at 1427. The referenced stipulation was undertaken to avoid spending time on those welding inspectors whose testimony would have been repetitive and cumulative. Tr. 3747-52 (10/19/83); 7380-83 (11/16/83).

The Board's limits on numbers of witnesses and on time for cross-examination were necessitated by the inefficient, repetitious, and time-consuming cross-examination techniques of counsel for Palmetto. As the Board explained, it did not begin the hearings with the expectation of imposing time limits on the questioning of witnesses; however, "it became apparent that some system of time limits would be necessary -- particularly on cross-examination -- to enable the case to progress at a reasonable rate." LBP-84-24, 19 NRC at 1426. Similarly, the Board declined to set time limits at the outset of the foreman override hearings. Tr. 13,046-47; 13,163; 13,306 (10/09/84). However, the parties were all on notice that the hearing was scheduled to run for only two or three days (Tr. 12,847 (9/21/84); Tr. 13,046 (10/09/84) Tr. 13,330 (10/10/84)), and the Board indicated its willingness to hear Duke's witness panel, the Staff witness panel, and

"as many noncumulative employee witnesses [to be called by Palmetto/CESG] as time allows." Tr. 12,847. (In fact, this hearing ran for four long days. LBP-84-52, slip op. at 4).

Moreover, Palmetto/CESG's emphatic protestations that these time and witness limits have deprived them of their right to be heard are not supported by a single specific example of how they were prejudiced by the Board's reasonable efforts to regulate the course of the hearing and avoid unnecessary delay pursuant to 10 C.F.R. §2.718. This is fatal to their claim. See Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1096 (1983); Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-788, 20 NRC ____, ____, slip op. at 86-87 (Oct. 31, 1984).

The Board's imposition of reasonable time limits is consistent with both specific federal case precedent and with the general guidance set forth with the Commission's Statement of Policy on Conduct of Licensing Proceedings. See 19 NRC at 1428. Authority to set time limits on cross-examination is recognized in MCI Communications Corp. v. American Telephone & Telegraph Co., 85 F.R.D. 28 (N.D. Ill. 1979), aff'd., 708 F.2d 1081, 1170-1173 (7th Cir.), cert. denied, 104 S.Ct. 234 (1983).^{51/}

^{51/} Contrary to Palmetto/CESG's argument, the fact that the MCI case involved an antitrust action against the telephone company rather than an NRC licensing proceeding obviously does not, in itself, make the court's ruling on the procedural point in question
(footnote continued)

Palmetto/CESG's assertion (App. Br. at 45) that the Licensing Board has "transgressed the constraints" of Padovani v. Bruchhausen, 293 F.2d 546 (2d Cir. 1961) is also incorrect. In Padovani, the court of appeals granted plaintiff's petition for a writ of mandamus directing the judge to vacate a stringent preclusion order. See 293 F.2d at 547. The court ruled that while "the trial judge may take steps to expedite the hearing" if "an excess of witnesses is presented" at trial, id. at 549, "in no event at this pre-trial stage should witnesses be excluded because of mere numbers, without reference to the relevancy of their testimony." Id. at 550. Inasmuch as the issue raised herein does not involve pre-trial rulings, Padovani is inapposite.

In sum, the limits imposed by the Board were entirely reasonable under the circumstances, and were consistent with both the Commission's Statement of Policy and with the Board's authority.

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inapplicable. Palmetto/CESG's assertion that MC is inapposite because this proceeding is governed by a "pervasiveness test" which "require(s) consideration of additional testimony" also misses the mark. In this proceeding the Board found no evidence of a "pervasive" QA breakdown. See p. 7, supra. Palmetto/CESG provide no support for their insinuation that if additional evidence had been heard, such a "pervasive" breakdown would have become apparent. The record clearly refutes this theory.

- C. The record clearly demonstrates that Catawba's siren system meets the acceptance criteria of the Federal Emergency Management Agency and the NRC and that no further evaluation is required (App. Br. at 46-51)

On appeal, Palmetto/CESG dispute the Licensing Board's finding that the Catawba siren system is satisfactory. They allege (App. Br. at 46-48) that pursuant to NUREG-0654^{52/} and FEMA-43,^{53/} the Federal Emergency Management Agency ("FEMA") must conduct field acoustical tests of the sirens and a survey of the residents of Catawba's plume exposure pathway emergency planning zone ("plume EPZ") to verify compliance of the siren system with the acceptance criteria in FEMA-43; that the results of those tests are "material matters in the licensing proceeding;" and therefore, relying on Union of Concerned Scientists v. NRC, 735 F.2d 1437 (D.C. Cir. 1984) the results must be litigated.^{54/}

^{52/} NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (Nov. 1980) ("NUREG-0654"). Official notice of NUREG-0654 was taken at EP Tr. 4615-17, 6/8/84. (The transcript in the emergency planning proceeding, which was conducted before a separate Licensing Board, is paginated separately from the Safety and Environmental phase transcript. The emergency planning transcript is cited as "EP Tr.")

^{53/} FEMA-43, "Standard Guide for Evaluation of Alert and Notification Systems for Nuclear Power Plants" (Sept. 1983) ("FEMA-43"). The Licensing Board also took official notice of FEMA-43. EP Tr. 1597, 5/9/84.

^{54/} Duke notes that the UCS case was decided on May 25, 1984, two weeks before the close of the emergency planning hearings and more than two months before Palmetto/CESG filed their proposed findings, yet Palmetto/CESG did not raise that case below for consideration by the Licensing Board. This argument,
(footnote continued)

Palmetto/CESG mischaracterize the FEMA survey and FEMA's own field acoustical testing. Significantly, they ignore the fact, discussed infra, that Duke's independent acoustical consultant determined and testified that Catawba's siren system is in full compliance with FEMA's acceptance criteria in FEMA-43 assuming installation of an additional ten sirens. See LBP-84-37, 20 NRC at 972, 978.

Palmetto/CESG argue that they were deprived of their hearing rights in violation of §189(a) of the Atomic Energy Act, 42 U.S.C. §2239(a), by not being able to litigate the results of the as-yet unconduncted FEMA survey and acoustical field testing (App. Br. at 47-48). Upon examination, it is apparent that Palmetto/CESG's reliance on Union of Concerned Scientists v. NRC for this argument is ill-founded. In UCS, the U.S. Court of Appeals invalidated that portion of the Commission's emergency planning rules that removed consideration of results of emergency preparedness exercises as an issue in operating license hearings. See 735 F.2d at 1451. The UCS Court reasoned that because an exercise was required by the NRC's regulations prior to the issuance of a full power license (735 F.2d at 1440, 1442 n.9), and because the Commission relies on the results of such exercises as

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which could have and should have been raised previously should not now be entertained for the first time on appeal. See, e.g., Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 & 2), ALAB-459, 7 NRC 179, 188-89 (1978); Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Unit No. 2), ALAB-335, 3 NRC 830, 842 n.26 (1976).

material to its licensing decision (735 F.2d at 1443), the Commission could not exclude consideration of this material issue from hearings under §189(a) of the Atomic Energy Act, 42 U.S.C. §2239(a). See 735 F.2d at 1444-45, 1451.

Significantly, the Commission does not rely on the results of any FEMA field testing or survey as material to its licensing decision. In marked contrast to the explicitly mandatory precondition status of emergency preparedness exercises, discussed in the UCS case, there is no such similar precondition in the regulations of FEMA or the NRC that either a survey or a field acoustical test be conducted as a necessary prerequisite for a full power license.

Compare 10 C.F.R. Part 50, App. E, §IV.F.1.b. ("A full-scale exercise . . . shall be conducted . . . within one year before issuance of the first operating license for full power, and prior to operation above 5% of rated power") (emphasis added) with 10 C.F.R. §50.47(b)(5), 44 C.F.R. §350.5(a)(5), and 10 C.F.R. Part 50, App. E, §IV.D. (no similar requirement that FEMA shall conduct a survey or a field acoustical test prior to operation above 5% power. 10 C.F.R. Part 50, App. E, §IV.D.3. requires only that each "reactor licensee shall demonstrate that administrative and physical means have been established for alerting and providing prompt instructions to the public") (emphasis added) (placing no requirement of a FEMA survey or a FEMA

acoustic field test). Duke, as reactor licensee, has already made this demonstration and this has been fully litigated.

See LBP-84-37, 20 NRC at 978.^{55/}

The first and the only one of these two FEMA activities with even a generally prescribed time-frame is a telephone survey to be performed by a FEMA contractor on a "yearly" basis. See NUREG-0654, App. 3 at 3-3 to 3-4, 3-13; EP Tr. 1569-71, 5/9/84 (discussing FEMA's "Guidance Memorandum 18"). The language of futurity used with respect to that survey stands in marked contrast to the language that is used in the adjoining paragraphs of NUREG-0654 to describe mandatory requirements: "the [notification] system shall provide an alerting signal and notification by commercial broadcast." NUREG-0654, App. 3 at 3-3 (emphasis added). Thus this FEMA survey, described in the regulatory guidance, is contemplated to be conducted on an annual basis once the sirens are operable, but is not described as a mandatory prerequisite for full power operation. In light of the fact that the last

^{55/} Indeed, the results of FEMA's field acoustical tests would seem to qualify under the "tests or inspections" exception from the APA hearing requirements in 5 U.S.C. §554(a)(3) "because these methods of determination do not lend themselves to the hearing process." See UCS, 735 F.2d at 1449. Unlike the results of emergency preparedness exercises, which the D.C. Circuit held are not exempt from hearings under this exception, the results of field acoustical testing does not involve "a central decisionmaker's consideration and weighing of many others [sic] persons' observations and first hand experiences, questions of credibility, conflicts and sufficiency." See id. at 1450.

ten sirens were installed as recently as September 1984^{56/} it is of little consequence that this "yearly" survey has not yet been conducted.

With respect to FEMA's field acoustical testing of the siren system, there is no legal requirement nor even regulatory guidance that places a time-frame on the completion of FEMA's field acoustical testing. As explained by the FEMA witnesses, this field testing is not required to be conducted on a strict timetable, but will be completed "at some future date." Staff Exh. EP-2, p. 21.^{57/} Indeed, FEMA has only recently begun to conduct these field acoustical tests, with priority being given to those plants that are already operating. EP Tr. 1571, 5/9/84.^{58/} Absent a contrary requirement in law or the regulatory guidance, FEMA's discretion to proceed at their planned rate of evaluating one nuclear plant every two months should not be disturbed. See EP Tr. 1578, 5/9/84; see, also, e.g., Carstens v. NRC, 742 F.2d 1546, 1557 (D.C. Cir. 1984).

^{56/} See LBP-84-37, 20 NRC at 972.

^{57/} The emergency planning exhibits are numbered separately from those offered during the safety and environmental phase hearings, being designated by the prefix "EP."

^{58/} All of the nuclear plant emergency plans that have been approved by FEMA pursuant to 44 C.F.R. Part 350 are subject to a caveat that their notification systems must later pass a technical evaluation in the FEMA field acoustical test. EP Tr. 1576, 5/9/84; Staff Exh. EP-2, p. 22.

FEMA's review and approval of emergency preparedness at Catawba, in accordance with 10 C.F.R. §50.47(a)(2), has been based primarily upon a review of the emergency plans, as well as FEMA's evaluation of the February 1984 emergency exercise held at Catawba. See Staff Exh. EP-2, pp. 20-22 (testimony of FEMA witnesses); Staff Exh. EP-3 (FEMA findings). FEMA found that the sirens have been periodically tested satisfactorily and were effectively coordinated with Emergency Broadcast System messages during the February exercise. Id. at 20-21. Accordingly, FEMA has properly made a positive finding as to Duke's compliance with 10 C.F.R. §50.47(b)(5). See, e.g., Staff Exh. EP-2, p. 22; 10 C.F.R. §50.47(a)(2). These FEMA findings^{59/} were fully litigated before the Licensing Board, with the FEMA witnesses being subjected to a full day of cross-examination, most of which was conducted by Palmetto/CESG. See EP Tr. 1469-1562, 5/9/84 (CESG); EP Tr. 1562-1648, 5/9/84 (Palmetto). Litigation of these FEMA findings is the most that the UCS case could be argued to require in connection with the Catawba siren system; indeed, the adequacy of litigation of the FEMA findings has not been challenged by Palmetto/CESG.^{60/}

^{59/} The NRC licensing process need not await the "final" FEMA findings; instead the NRC relies on the "interim" FEMA findings when licensing nuclear plants in a contested operating license proceeding. Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), ALAB-776, 19 NRC 1373, 1377-82 (1984); see also EP Tr. 1581-83 (5/09/84).

^{60/} In conformity with the UCS case, the parties (including
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Palmetto/CESG also assert that the UCS case in some way invalidates or calls into question the NRC's use of "predictive" findings in emergency planning matters (App. Br. at 51). This assertion is difficult to square with the Court's explicit statements to the contrary in that case. See, 735 F.2d at 1445 n.14; see also id. at 1448. Thus the vitality of the Licensing Board's reliance upon Waterford, which recognizes predictive findings, is unimpaired. See Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076 (1983).

Additionally, Palmetto/CESG mischaracterize the Licensing Board's ruling on the siren system's adequacy, claiming that the Licensing Board approved the Catawba alert and notification system "on the basis of a predictive finding that the system will be adequate at some unspecified future time." (App. Br. at 47). This assertion is obviously wrong. The only thing that the Licensing Board "predicted" was that Duke would indeed install the ten additional sirens that it had committed to install by September 1, 1984. See LBP-84-37,

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Palmetto/CESG) were allowed upon numerous occasions to examine witnesses on the conduct and results of Catawba's February 1984 emergency preparedness exercise. See, e.g., EP Tr. 1515-16 (use of EBS messages during exercise); 1548-51 (dose rates used during exercise); 1551-55, 1560-61 (location of plume during exercise); 1563 (importance of exercise to FEMA review); 1603-11 (public participation in exercise); 1611-20 (decontamination during exercise); 1620-31 (plume and meteorology during exercise) 5/9/84.

20 NRC at 972. These ten sirens have been installed. The Licensing Board properly credited the expert testimony of Dr. Bassiouni, Duke's independent acoustical consultant retained to evaluate the Catawba siren system. Dr. Bassiouni demonstrated, based on field measurements and confirmed computer modelling, that the Catawba siren system would fully meet the acceptance criteria of FEMA-43 once ten additional sirens, identified as necessary by his measurements and analysis, were installed. See LBP-84-37, 20 NRC at 972. The Licensing Board's finding, far from being a prediction of adequacy "at some unspecified future time" as Palmetto/CESG assert (App. Br. at 47), predicted compliance and system adequacy by September 1984. See, id. Thus, the Licensing Board had an extensive factual record, including expert testimony by an independent acoustical consultant, upon which it properly based its finding that the Catawba siren system is satisfactory and complies with the acceptance standards in FEMA-43.^{61/}

^{61/} Palmetto/CESG mention in passing (App. Br. at 49) a survey of the plume EPZ population which Palmetto/CESG offered as their exhibits EP-9 and EP-10 for identification, but was not admitted in evidence. See LBP-84-37, 20 NRC at 1015 (exhibit list). The Appeal Board, like the Licensing Board, cannot draw any inferences, favorable or unfavorable, from documents not in evidence, for they have never been explained fully by a witness subject to cross examination. See, e.g., Baton Rouge Marine Contractors v. FMC, 655 F.2d 1210, 1216 (D.C. Cir. 1981. In their brief before the Appeal Board, Palmetto/CESG do not challenge the propriety of the Licensing Board's rulings excluding these surveys.

The final portion of Palmetto/CESG's argument on the siren system challenges whether that system is adequate when less than 100% of the people in the plume EPZ will be able to hear a siren under all weather conditions, both indoors and out, and when a variety of household appliances are in operation (App. Br. at 50-51). The requirements of FEMA-43 and NUREG-0654 were not intended to guarantee this essentially unachievable goal, but rather were meant to establish a design objective for the siren system. See FEMA-43, pp. E-4 to E-5; LBP-84-37, 20 NRC at 973; see also LBP-84-37, 20 NRC at 973-74 and Kansas Gas & Electric Co. (Wolf Creek Generating Station, Unit 1), LBP-84-26, 20 NRC 53, 93 (1984).

In sum, the record evidence more than amply supports the Licensing Board's conclusions that the siren system is satisfactory, meeting the standards of FEMA-43.

D. The Licensing Board properly excluded certain contentions from litigation (App. Br. at 52-71)

Palmetto/CESG allege that the Licensing Board's dismissal of certain contentions constituted "arcane legal maneuvering involving the impermissible application of Commission Rules of Practice" which is reversible error (App. Br. at 52). As a threshold matter, they imply that the Licensing Board's dismissal of various contentions reflects an "impermissible 'crabbed interpretation' of [the] rules of practice" forced upon the Board by rulings of the Appeal Board and the Commission (App. Br. at 56). Palmetto/CESG's

characterization of the Appeal Board and Commission decisions in question (id.) totally misrepresents both the NRC's procedures and precedent under those procedures. Basically, Palmetto/CESG's position reflects a challenge to the validity of 10 C.F.R. §2.714 which is without merit.

It is well established that agencies are free to fashion their own rules of procedure. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 543 (1978); Bellotti v. NRC, 725 F.2d 1380, 1381 (D.C. Cir. 1983). The Court of Appeals has upheld the Commission's reasonable regulations on procedural matters such as the filing of petitions to intervene or the proffering of contentions under 10 C.F.R. §2.714. BPI v. AEC, 502 F.2d 424, 428-29 (D.C. Cir. 1974); Easton Utilities Commission v. AEC, 424 F.2d 847 (D.C. Cir. 1970).

In the exercise of this authority, the Commission has promulgated regulations governing late-filed contentions, which require licensing boards reviewing such contentions to balance the five factors set forth in 10 C.F.R. §2.714(a)(1). Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), CLI-83-19, 17 NRC 1041, 1045 (1983). The Commission has held that Section 189a of the Atomic Energy Act does not require that Boards treat the "good cause" factor of §2.714(a)(i) as controlling when a late contention is raised, and it is alleged that its untimeliness is due to unavailability of relevant documents, thereby automatically admitting untimely contentions for litigation. CLI-83-19, 17 NRC at 1045-46.

Rather, the Commission ruled that all five of the criteria in 10 C.F.R. §2.714(a) should be applied in this situation. 17 NRC at 1046.

Palmetto/CESG's assertion that the Commission decision "validated . . . an impermissible reading of its regulations" by imposing a "Catch-22 situation upon blameless intervenors" (App. Br. at 55-56) is in error. The effect of the Commission's decision is simply to require proponents of late-filed contentions wholly based upon information not publicly available at the time contentions would normally be filed to make the same showing that the proponent of other late-filed contentions must make in order to have them admitted. While this approach admittedly does not guarantee that all untimely contentions which could not have been filed in a timely manner under Commission rules will be admitted for adjudication, such is not required by NRC Rules of Practice. BPI v. AEC, supra, 502 F.2d at 428-29.

A review of the record relating to each of the seven categories of contentions dismissed demonstrates clearly that the Board's actions were proper in every instance.

1. Diesel generator contentions (App. Br. at 56-61)

On January 12, 1984, Palmetto/CESG submitted orally a late-filed proposed diesel generator contention; part of this contention involving crankshaft design adequacy was admitted. Tr. 12,541-50; February 23, 1984 Licensing Board Memorandum and Order (unpublished) (hereafter "February 23

Order"))).^{62/} In compliance with 10 C.F.R. §2.714(a)(1)(iii), as interpreted in Washington Public Power Supply System (WPPSS Nuclear Project No. 3), ALAB-747, 18 NRC 1167, 1177-78, 1180-81 (1983), the Licensing Board conditioned admission and further litigation of this contention upon Palmetto/CESG's showing by April 2, 1984, that it had obtained a qualified expert, and providing the substance of the evidence to which the expert would testify. See Tr. 12,548 (2/17/84). Shortly thereafter the Board also admitted its own sua sponte contention on diesel generators as a result of information provided by Duke about certain site-specific problems with the Catawba diesels.^{63/} See February 27, 1984 Memorandum and Order (unpublished) at 2.

^{62/} Palmetto/CESG mischaracterize the Board's February 23 Order when they state: "The Licensing Board excluded the more difficult 'generic' aspects of our claims reasoning that it would be unable to render its safety decision prior to Applicants' early May fuel load date if such contentions were to be litigated in this proceeding." App. Br. at 58. In fact, the Board states plainly therein that it "rejected the two generic parts of the diesel generator contention for several reasons." February 23 Order at 6. (emphasis added). The Board makes abundantly clear that it rejected these contentions because of the delay factor and because the Board "concluded that factor three -- contribution to the proceeding -- weighed against admission of the generic issues, which appear to be more complex than the crankshaft issue." Id., citing Tr. 12,549.

^{63/} This contention encompassed matters, reported to the Licensing Board by Duke, which had come to Duke's attention during an extended test, inspection, and qualification program for its diesel generators. The Licensing Board, as well as the parties to the proceeding, were kept fully apprised of the progress of this program. On June 1, 1984 and June 29, 1984 Duke filed with the NRC, and served on all the parties, its reports on this program.

Palmetto/CESG subsequently defaulted on their obligation to obtain a diesel generator expert and the Licensing Board consequently dismissed their contention on crankshaft design adequacy. See April 13, 1984 Order. The Board's sua sponte. Catawba-specific contention remained.

On June 8, 1984, the Commission, exercising its review authority of Board sua sponte contentions, dismissed the Licensing Board's contention. However, upon motion by Palmetto/CESG, the Licensing Board subsequently allowed them to sponsor, and re-admitted, the identical contention. In balancing the five factors of 10 CFR 2.714(a)(1) the Board specifically required Palmetto/CESG to demonstrate they could make a contribution to the proceeding, and warned them that if they did not, it "will result in dismissal of this contention." 19 NRC at 1586, n.50.

On July 6, 1984, Palmetto/CESG named a Dr. Robert Anderson as their diesel generator expert. However, questions were subsequently raised regarding the role, if any, that Dr. Anderson would play in litigation of the contention. The Licensing Board therefore informed Palmetto/CESG that it expected Dr. Anderson to do more than lend his name to the proceeding to serve as a vehicle for admission of the contention. The Board gave Palmetto/CESG the alternative of either (1) certifying by August 1 that Dr. Anderson would review reports and be present to assist in cross-examination at the hearing; or 2) preparing and

providing by August 20 a statement of their technical position prepared with substantial assistance from qualified experts. See July 20, 1984 Memorandum and Order at 4-5.

On August 1, Palmetto/CESG indicated by letter that they were unable to certify Dr. Anderson's participation. However, in an August 10, 1984 conference call, the Licensing Board provided them yet another opportunity to make the requisite showing, directing them to certify either that they had a qualified expert who would attend the hearing and assist them, or that they would, on August 21, file a statement of technical position (prepared with substantial expert assistance) on the Catawba diesel question and on Duke's reports. Tr. 12,813-15 (8/10/84).

On August 16 Palmetto/CESG filed a technical position document. Contrary to the explicit direction of the Board, that document did not address Catawba-specific diesel generator problems, nor was it prepared with the assistance of an expert. Rather, the document made certain general, unsupported assertions with respect to the Catawba diesel generators, and in support of such, simply attached testimony filed on behalf of intervenors (not affiliated with Palmetto/CESG) in the Shoreham proceeding^{64/} which dealt with

^{64/} Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1, Docket No. 50-322). The Shoreham diesel generators are a different type and design than Catawba's. September 4, 1984 Memorandum and Order at 3, n.2 (hereafter "September 4 Order"). In addition, the Board had specifically warned Palmetto/CESG that simple reliance on materials filed in the Shoreham docket was insufficient to make their case at Catawba. Id. at 2-5.

Transamerica Delaval diesel generators. After Duke and NRC Staff filed testimony, on August 22 the Licensing Board dismissed the contention, based upon Palmetto/CESG's default in failing to meet the conditions properly imposed under §2.714(a)(1)(iii). See September 4 Order.

The foregoing demonstrates that Palmetto/CESG were given repeated opportunities by a lenient Board to litigate issues involving Catawba's diesel generators but were incapable of doing so.^{65/} Palmetto/CESG have failed to demonstrate any error in the Board's ultimate dismissal of their contention. On the contrary, the record makes clear that their assertion of error on this issue is patently frivolous -- a blatant example of "judicial chutzpah."

2. Control room design contention (App. Br. at 61-63)

As part of its original dismissal of Palmetto/CESG's control room contention for lack of specificity, the Licensing Board directed Duke to serve copies of its control room procedures and control room design review on Palmetto/CESG when such became available so that, if they

^{65/} Palmetto/CESG's citation (App. Br. at 60-61) to the Point Beach decision (Wisconsin Electric Power Co. (Point Beach Nuclear Plant, Unit 2), CLI-73-4, 6 AEC 6, 7 (1973)) is inapposite. Point Beach dealt with a situation in which a licensing board was to hold a hearing on remand on an issue raised by intervenors. Of course, under such circumstances intervenors were entitled to participate in the trial of their own issue, which had been properly raised so as to be admitted for litigation in the proceeding. But such is markedly different from the instant situation, where the question is whether the issue sought to be litigated by Palmetto/CESG meets applicable standards for consideration in the NRC's adjudicatory proceedings.

desired, Palmetto/CESG could file timely new contentions based on that information. Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-82-107A, 16 NRC 1791, 1795 n.2, 1795-96 (1982). See also Tr. 664-65 (1/20/83). Consistent with that direction, on February 28, 1983 Duke submitted to Palmetto and CESG Duke's Control Room Design Review Plan. In a March 31, 1983 telephone conference call among the Licensing Board and the parties, counsel for Duke advised that additional documentation concerning control room design would soon be filed, along with a cover letter alerting the Board and parties that, in Duke's view, any additional contentions on control room design should be filed within thirty days of receipt. See April 1, 1983 Licensing Board Memorandum and Order at 3. The Licensing Board directed that any party that believed another conference call was necessary to discuss a filing deadline for new contentions should telephone the Licensing Board promptly. Id. Palmetto/CESG took no action.

On April 18, 1983, Duke filed a motion with the Licensing Board asking it to direct Palmetto/CESG to file new contentions, if any, concerning control room design review. Neither Palmetto nor CESG filed a response to Duke's motion. On June 1, 1983, copies of the supplement to the control room design review were transmitted to the NRC, Palmetto, and CESG, among others. This information was sufficient to enable Palmetto/CESG to prepare a contention. On June 8,

1983, counsel for Duke informed the Licensing Board and all of the parties of this fact in a letter. Palmetto/CESG never filed any new contentions on the control room design matter. (However, they filed numerous emergency planning contentions on material received at approximately the same time).

Indeed, Palmetto/CESG did not take any action on the control room design matter until January 31, 1984, when they sought to raise the issue as grounds to hold the record open shortly before the close of the last day of hearings on the safety phase of the proceeding. Tr. 12,404-07 (1/31/84). In a February telephone conference call held after the close of that hearing, Mr. Guild, counsel for Palmetto, stated to the Board that he would hate to see the control room design issue "simply go by the board as a result of, you know, what I will characterize as, you know, as my neglect." Tr. 12,564 (2/17/84). On April 12, 1984, Palmetto/CESG submitted a late-filed contention on control room design.^{66/} The Licensing Board properly rejected the now untimely control room design contention once more because of Palmetto/CESG's failure to justify their tardiness and to demonstrate an ability to make a substantial contribution to the resolution of the technical issues involved in a challenge to control room design. LBP-84-24, 19 NRC at 1425 n.3.

^{66/} Palmetto/CESG's assertion that this contention was "timely" is erroneous. While it was filed promptly after issuance of the Staff's draft SER, the information on which that SER was based was contained in the documents submitted by Duke on June 1, 1983 and transmitted to Palmetto/CESG that same date.

In sum, Palmetto/CESG had ample opportunity to submit a control room design contention. Because they long ago defaulted on that opportunity, after more than sufficient notice, the Appeal Board should affirm the Licensing Board's dismissal of the untimely control room design contention.

3. Hydrogen control contentions (App. Br. at 63-65)

Palmetto/CESG raised two general contentions related to an explosive hydrogen-oxygen reaction within the reactor containment following a loss-of coolant accident, viz., Palmetto Contentions 9 and 31 (CESG Contention 2). The Licensing Board, relying on established NRC precedent,^{67/} properly rejected these contentions, holding that the matter was being addressed in the rulemaking process. The Licensing Board recognized that hydrogen issues could be litigated (pursuant to Commission direction^{68/}) if a credible accident scenario were postulated. Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-82-16, 15 NRC 566, 584 (1982).

Thereafter, Palmetto/CESG sought reconsideration of the Licensing Board's ruling, advancing four accident scenarios they maintained were credible. The Licensing Board properly disposed of one of these accident scenarios (stud bolt failure) by holding that litigation of this issue was barred by the doctrines of res judicata and collateral estoppel.

^{67/} Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), ALAB-655, 14 NRC 799, 816 (1981).

^{68/} See Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), CLI-80-16, 11 NRC 674, 675 (1980).

The remaining three accident scenarios were dismissed based upon the Board's determination that the then on-going rulemaking directly addressed Palmetto/CESGs' hydrogen concerns.^{69/} 16 NRC 1791, 1807-10.

On April 12, 1984 Palmetto/CESG renewed their hydrogen generation contentions, seeking "an opportunity to litigate the plainly credible accident scenarios." Again, the Licensing Board properly dismissed the contentions (now late-filed) on the basis of the ongoing rulemaking. 19 NRC at 1425 n.3.^{70/}

The Licensing Board's actions in ruling out the contentions because the issue raised was being addressed in a pending rulemaking were consistent with NRC practice. See Union of Concerned Scientists v. AEC, 499 F.2d 1069, 1086-91 (D.C. Cir. 1974); Ecology Action v. AEC, 492 F.2d 998, 1002 (2nd Cir. 1974).

^{69/} The Licensing Board informed Palmetto/CESG that its action did not mean that they "may not have their hydrogen scenarios considered at all." 16 NRC at 1810. Rather, Palmetto/CESG were directed specifically to the ongoing rulemaking proceeding. In this regard, Duke notes that the proposed rule specifically requested comment on hydrogen generation scenarios that should be considered, and provided a listing of those scenarios which the Commission was considering. 46 Fed. Reg. 62283-84 (1981). An examination of the rulemaking record indicates that Palmetto/CESG failed to comment.

^{70/} Palmetto/CESGs' pleading challenged the Licensing Board's ruling dismissing three accident scenarios on the basis of ongoing rulemaking. They did not challenge the Board's ruling regarding the fourth scenario (stud bolts). Litigation of this issue should be viewed as waived.

This rulemaking was approved by a vote of the Commission in a public session on December 10, 1984, finalized on January 18, 1985, and published in the Federal Register on January 25, 1985 (50 Fed. Reg. 3498 et seq.). Subsection 50.44(c)(3)(vii)(B) of the rule provides:

However, the record in this rulemaking shows that such preliminary analyses are not necessary for a staff determination that a plant is safe to operate at full power if the staff has determined for similar plants, referenced in this notice of rulemaking, that similar systems provide a satisfactory basis for a decision to support operation at full power until the preliminary analyses have been completed.

50 Fed. Reg. at 3505.

Plants similar to Catawba (i.e., Sequoyah and McGuire) were referenced in the notice of rulemaking. See 46 Fed. Reg. at 62281-82. As can be seen from the dissent of Commissioner Asselstine and the Chairman's comments on the dissent, it is clear that this language was inserted into the now final rule for the express purpose of excluding from litigation hydrogen issues in cases such as Catawba. See 50 Fed. Reg. at 3502-04.

Supplemental information supporting the final rule^{71/} makes clear that in adopting the final rule, the Commission, consistent with the Licensing Board's decision (16 NRC at 1809-10) and the Appeal Board's Rancho Seco decision, found,

^{71/} The statement of considerations, or preamble, to an agency regulation represents "the administrative construction of the regulation, to which 'deference is . . . clearly in order.'" Fidelity Federal Savings & Loan Ass'n v. Cuesta, 458 U.S. 141, 158 n.13 (1982), quoting Udall v. Tallman, 380 U.S. 1, 16 (1965).

first, that the use of distributive ignition systems in general, and the ignition system installed at McGuire in particular, was acceptable in meeting the hydrogen control requirements imposed. See, e.g., SECY 83-357A, at 3, 8, 10; Enclosure F at 5, 13, 15-16; Enclosure G at 4, 6, 8, 9, 12-13; see particularly Enclosure G, 9, wherein it is stated that the backfit required to meet the regulations would only be applicable to the five operating ice condenser plants (including McGuire) and they have already had the required modifications made (i.e., their hydrogen control systems comply with the regulation. The ignition system installed at McGuire is virtually identical to that installed at Catawba. On this point, the Appeal Board recently stated:

As a matter of fact, Catawba's ice condenser containment and associated hydrogen mitigation system are not totally unique. They are to be found, for example, at Duke Power Company's McGuire facility. In affirming the Licensing Board's authorization of operating licenses for McGuire, we discussed the hydrogen mitigation system at considerable length. See Duke Power Co. (William B. McGuire Nuclear Station, Units 1 & 2), ALAB-669, 15 NRC 453, 459-72 (1982).

Catawba, ALAB-794, slip op. at 7.

Second, the Commission found that a representative spectrum of degraded core accident scenarios were addressed by the rule. See, e.g., SECY-84-357A at 8, wherein it is stated: "Since the Commission has already considered the PWR ice condenser plants during its deliberations on the McGuire and Sequoyah cases acceptable accident scenarios are established;" see also Enclosure F at 15-16.

Third, the Commission found that several hydrogen combination phenomena were considered by the rule. Id. In this regard, it is important to note that the cost/benefit document accompanying the Commission's hydrogen rule (SECY-83-357A, Enclosure G) focused on the distributive ignition system used in McGuire and Catawba as the basis for its cost analysis. In its benefits section, this Staff document concluded:

[t]he net result of codifying these requirements into the NRC regulations will be to eliminate the need for redundant litigation of this particular hydrogen control issue in future licensing cases. Id. at p. 13.

Palmetto/CESGs' hydrogen control contentions were properly rejected, based on the hydrogen control rulemaking for ice condenser plants. However, Palmetto/CESGs' failure to provide credible accident scenarios supporting their proposed contentions provides an equally valid basis for rejecting these contentions. Each of Palmetto/CESGs' three hydrogen generation scenarios^{72/} is on its face technically incorrect and internally inconsistent. Moreover, each of these three scenarios constitutes a challenge to NRC regulations (including the single failure criterion set forth in 10 C.F.R. Part 50, Appendix A) without the requisite showing of special circumstances. See 10 C.F.R. §2.758.

^{72/} The stud bolt failure scenario does not include allegations of containment breach due to hydrogen generation, and clearly is precluded from litigation (1) for the reason advanced by the Licensing Board, (2) res judicata, (3) waiver.

Finally, Duke submits that in each instance the critical initiating condition giving rise to the scenario was previously addressed by the Licensing Board.^{73/}

In sum, the rulemaking record supports the Licensing Board decision to dismiss these contentions. Moreover, the linchpin of each accident scenario has already been litigated, or could have been litigated absent Palmetto/CESG's default, and a result contrary to them reached. Accordingly, Duke submits that Palmetto/CESG have failed to demonstrate any reversible error in the Licensing Board's rulings.

4. Financial qualifications contention (App. Br. at 65-67)

Palmetto/CESG originally submitted a financial qualifications contention in 1981 which focused on whether Duke's municipal co-owners are financially qualified to

^{73/} With respect to the loss of off-site power scenario, Palmetto/CESG were permitted to litigate a diesel generator contention, which is a linchpin issue with regard to station blackout. Their default on this issue, (see discussion in Section III.D.1., *supra*) precludes further litigation of the matter. With regard to ATWS, the initiating premise set forth in the scenario (i.e., that the nil ductility temperature ("NDT") of the reactor vessel has increased to above 200°F) was raised by Palmetto/CESG and litigated in this proceeding. See Palmetto Alliance Contention 44 (CESG 18). With regard to this issue, Duke maintains that the Board's finding that there is reasonable assurance that the NDT will not rise above 200°F, is dispositive of this scenario. 19 NRC at 1575. With regard to the fatigue failure scenario, this precise issue was litigated in this case. See 19 NRC at 1574-77. The premise for the accident, *viz.*, a NDT in excess of 200°F, was specifically rejected by the Licensing Board on the basis of record evidence. 19 NRC at 1575.

operate Catawba. The Licensing Board ruled at that time that the contention was barred by a Commission regulation which eliminated financial qualifications review for electric utility applicants. Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-82-51, 16 NRC 167, 168 (1982). This rule was subsequently found deficient in certain limited respects in New England Coalition on Nuclear Pollution v. NRC, 727 F.2d 1127 (D.C. Cir. 1984). (The rule has since been amended to comply with the Court's mandate.)^{74/} Based upon the New England Coalition decision, on April 12, 1984, Palmetto/CESG submitted late-filed contentions questioning the financial qualifications of the small municipal and cooperative co-owners.

However, in a Statement of Policy issued on June 7, 1984, the Commission correctly found that in New England Coalition the Court of Appeals had not vacated the Commission's financial qualifications rule, and that therefore financial qualifications reviews need not be reinstated for electric utility applicants for operating licenses. 49 Fed. Reg. 24111 (1984). See also 10 C.F.R. §50.40(b). On the basis of the Commission's Statement of

^{74/} In New England Coalition, the Court simply held that the Commission's rationale in its March 1982 rule was internally inconsistent because it justified eliminating financial qualifications review for all classes of applicants, not just electric utilities. Significantly, the Court did not vacate the previous rule. It was for this reason that the Commission issued the June 1984 Statement of Policy, indicating that financial qualifications reviews would not be reinstated for electric utility applicants for operating licenses.

Policy, the Licensing Board properly dismissed Palmetto/CESGs' 1984 proposed contentions on financial qualifications. 19 NRC at 1425 n.3. After that dismissal, the Commission published a new final rule on litigation of financial qualifications contentions which complies with the Court's mandate. 49 Fed. Reg. 35747 (Sept. 12, 1984). This new rule buttresses the Commission's June 7 Statement of Policy.

The Licensing Board cannot be faulted for dismissing a contention which is expressly excluded from licensing proceedings by Commission regulation and for which Palmetto/CESG did not make the showing required by 10 C.F.R. §2.758. See Commonwealth Edison Co. (Byron Nuclear Power Station, Units 1 & 2), ALAB-793, 20 NRC ____, ____ slip op. at 67-70 (Dec. 20, 1984); Kansas Gas & Electric Co. (Wolf Creek Generating Station, Unit 1), ALAB-784, 20 NRC 845, 847 (1984). Palmetto/CESG's argument on this issue falls far short of the showing needed for the Appeal Board to reverse the Licensing Board's dismissal of this contention.

5. Environmental contentions (App. Br. at 67-71)

Palmetto/CESG assert that the Licensing Board's dismissal of three environmental claims dealing with severe accidents, transshipment of spent nuclear fuel, and need for power constitutes a violation of the National Environmental Policy Act (NEPA). The Board's treatment of each of these categories of contentions is discussed below.

a. Severe accidents

Palmetto/CESG filed numerous contentions on this topic (Palmetto 2, 5, 10, 31 (CESG 2), 36 (CESG 9), 37 (CESG 10), DES-1 and DES-22). Palmetto 2 and 31 (CESG 2) involve hydrogen generation and are discussed in Section III.D.3, supra. Palmetto 5 expressed a generalized concern about severe accidents at Catawba. The Licensing Board rejected this contention for lack of specificity, but added that it might accept another contention on this issue if Palmetto were to postulate "a specific serious and credible accident scenario at Catawba." LBP-82-16, 15 NRC at 583. This invitation of the Board led to Palmetto/CESGs' filing of the four accident scenarios discussed in section III.D.3, supra.

Palmetto 10 alleged that the "economic costs of a severe accident with release of radiation to the environment (a so-called Class 9 accident) were not considered in the CP review for Catawba."^{75/} Palmetto 36 (CESG 9) took the position that the impact statement should consider "the entire spectrum of serious release accidents, including PWR-1 to PWR-9" and that consideration should recognize "that local officials and resources are not qualified to assure protection of the public health and safety in the event of a serious

^{75/} The DES and FES in this operating license proceeding did consider severe accidents. See Final Environmental Statement related to the operation of Catawba Nuclear Station, Units 1 and 2, NUREG-0921, January, 1983, at section 5.9.4. DES-1 and DES-22, discussed infra reflect this fact.

accident."^{76/} As it did with Contention 2, the Licensing Board properly rejected these contentions for lack of specificity. LBP-82-107A, 16 NRC at 1793-94. Palmetto 37 (CESG 10) took the position that an "adequate crisis relocation plan" should be a condition of an operating license, as "particulate releases in serious accidents, such as PWR 1" require relocation of the "affected population."^{77/} The Licensing Board rejected this contention as an impermissible attack on the NRC's regulations. LBP-82-16, 15 NRC at 587.

DES-1 and DES-22 challenged the reliance upon the Reactor Safety Study (WASH-1400) in the Draft Environmental Statement's ("DES") analysis of accidents more severe than design basis. These contentions were properly rejected by the Licensing Board on several grounds, including lack of specificity.^{78/} For example, DES-1 sought to place in issue

^{76/} This second portion of Palmetto 36 (CESG 9) was properly rejected by the Board as premature since the local emergency plans were not yet available, LBP-82-16, 15 NRC at 582-83. Some of Palmetto/CESG's subsequently filed emergency planning contentions covered the same ground, were litigated, and were resolved in Duke's favor. See, e.g., LBP-84-37, 20 NRC at 954-59 (EPC-3, challenging adequacy of food, clothing, bedding, and shelters); *id.* at 959-61 (EPC-6, involving decontamination of evacuees).

^{77/} When questioned by the Board as to what he would consider an "adequate" plan, CESG's representative responded that the plan should provide for relocation for "Oh, six centuries." Tr. 341.

^{78/} The one aspect of DES-22 admitted by the Licensing Board was subsequently dismissed. See March 24, 1983 Memorandum and Order (unpublished) at 4-5.

in this proceeding the characteristics of the accidents at Browns Ferry and Fermi. The Licensing Board properly held that such were beyond the scope of this proceeding, "at least in the absence of some showing that the [DES] analysis was dependent on them." LBP-82-107A, 16 NRC at 1797. No such link was shown. DES-22 sought to place in issue whether WASH-1400 was appropriate for use in this proceeding because of Catawba's ice condenser containment. The Board rejected that contention on the basis of the ongoing hydrogen rulemaking. LBP-82-107A, 16 NRC at 1796-1798. As the discussion above reflects (pp. 74-79, supra) that rulemaking -- in which Palmetto/CESG were explicitly invited to participate on several occasions -- is now complete. Duke asserts that all of these contentions involving severe accidents were properly rejected.

b. Transshipment of spent fuel

Two environmental contentions dealing with transshipment of spent fuel from Duke's Oconee or McGuire Nuclear Stations to Catawba were rejected. Palmetto/CESG assert that, without consideration of such contentions, the environmental costs and benefits of such transshipment were not weighed and thus that the environmental assessment will be flawed. They further allege that that Board improperly concluded that the environmental impacts of such

transshipment fall within the scope of Table S-4 of 10 C.F.R. Part 51. However, examination of the record shows that the Licensing Board's rejection of these contentions was proper.

The Licensing Board carefully considered the rather complex arguments which the parties raised with respect to these contentions and issued thorough and well-reasoned opinions supporting its decisions. See Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-83-8B, 17 NRC 291 (1983); Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), LBP-83-56, 18 NRC 421 (1983). Much of the discussion of these contentions focused on whether the environmental effects or costs of shipping Oconee and McGuire spent fuel to Catawba would come within the boundaries of Table S-4. Duke stipulated that any such shipments from other Duke Power Company facilities to Catawba would be scheduled so that their environmental impacts would not exceed the values contained in Table S-4. Accordingly, the NRC Staff concluded in the Final Environmental Statement ("FES") that no new environmental impacts would be introduced by the transportation of spent fuel from Oconee and McGuire. Moreover, since the environmental effect of transporting spent fuel away from the Oconee and McGuire facilities to a fuel reprocessing plant (including intermediate shipment to a facility such as Catawba) had already been considered and factored into the licensing of those plants, it was not

necessary to count these environmental costs another time.^{79/}
The NRC Staff thus concluded that it was not necessary to factor any environmental costs for transport of non-Catawba spent fuel into the cost/benefit balancing for Catawba.

Because the potential transportation of spent fuel raised by these contentions was viewed as coming within the scope of Table S-4, Palmetto/CESG's contentions were rejected as impermissible attacks on NRC regulations.^{80/} 17 NRC at 294. They were also rejected on the alternative basis that they lacked adequate specificity and thus failed to satisfy 10 C.F.R. §2.714(b). Id. at 295. The Board further ruled that if Palmetto/CESG believed Table S-4 should not apply and if they could identify with reasonable specificity those environmental impacts not adequately accounted for by Table S-4, they should file a petition pursuant to 10 C.F.R. §2.758

^{79/} Final Environmental Statement related to the operation of Catawba Nuclear Station, Units 1 and 2, NUREG-0921, January 1983, at Appendix G (p. G-1).

^{80/} Palmetto/CESG's assertion that Table S-4 does not apply to shipments such as contemplated herein (App. Br. at 69-70) was faced squarely by the Licensing Board, which found:

We disallow [the Palmetto/CESG position which] seeks to avoid application of the Table S-4 values about transportation solely on the grounds that the spent fuel [from Oconee and McGuire] would be destined for the Catawba storage pool, instead of the hypothetical reprocessing plant referred to in the Table S-4 rule (10 C.F.R. §51.20(g)(1)). [Palmetto/CESG do] not postulate why the impacts of transporting to these different types of destinations would be different. We think they would be substantially the same and therefore that the Table S-4 values would apply.

delineating those special circumstances which could justify a waiver of the rule. Id. at 294. Palmetto/CESG never did so. In sum, Palmetto/CESG have failed to demonstrate any impropriety in the Board's decisions dismissing the instant contentions.

c. Need for power

Palmetto/CESG claim that the Licensing Board erred in rejecting three cost/benefit contentions challenging the need for the power to be generated by Catawba. The Board rejected DES-6 and 8 as challenging the need for the Catawba facility's power at the operating license stage, after the plant is approaching completion, in violation of 10 C.F.R. §51.53(c). See LBP-82-107A, 16 NRC at 1801 (1982). In issuing the current need-for-power rule, the Commission explained that even assuming that the facility's power is to be used to replace existing power, need for power and alternative energy issues need not be considered at the operating license stage because such reconsideration would not likely tilt the cost-benefit balance against issuing the license. 47 Fed. Reg. 12,940 (April 26, 1982). Accordingly, the Commission removed from operating license proceedings such as Catawba's the issue of whether substituting a new nuclear plant's power for existing, less economical means of power production results in additional costs or reduced benefits. Because that is precisely the issue raised by Contentions DES 6 and 8, these contentions were properly

denied admission. In any event, it should be noted that Palmetto/CESG were explicitly directed to the provisions of 10 C.F.R. §2.758 concerning this contention (see LBP-82-16, 15 NRC at 586) and chose not to avail themselves of this avenue.

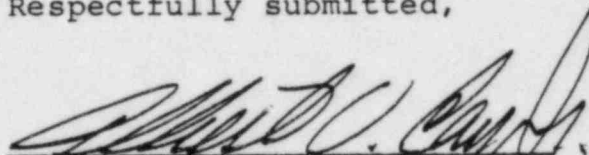
Palmetto/CESG raised a related cost/benefit claim in their rejected Contention DES-7. That contention sought to inject fixed capital costs (including construction costs) into the NEPA cost/benefit analysis. It is well-settled in NRC practice, however, that the costs of construction are not considered in the cost/benefit analysis at the operating license stage because it simply comes too late. See 15 NRC at 584; LBP-82-107A, 16 NRC at 1801.

Palmetto/CESG "dispute the application of the Commission's need for power rule to exclude these contentions," but provide no support for their position (see App. Br. at 71). Nor do they explain how the Board's dismissal of these contentions is inconsistent with the Calvert Cliffs decision. Id. These arguments should therefore not be considered. See also Commonwealth Edison Co. (Byron Nuclear Power Station, Units 1 & 2), ALAB-793, 20 NRC ___, ___, slip op. at 38-39 (Dec. 20, 1984). Palmetto/CESG have shown no error in the Board's dismissal of these contentions.

IV. CONCLUSION

For the above stated reasons, Duke submits that Palmetto/CESG's appeal should be denied and the Partial Initial Decisions be amended as appropriate to reflect the several matters Duke has raised.

Respectfully submitted,



J. Michael McGarry, III
Anne W. Cottingham
Mark S. Calvert
BISHOP, LIBERMAN, COOK,
PURCELL & REYNOLDS
1200 Seventeenth Street, N.W.
Washington, D.C. 20036
(202) 857-9833

Albert V. Carr, Jr.
DUKE POWER COMPANY
P.O. Box 33189
Charlotte, North Carolina 28242
(704) 373-2570

Attorneys for Duke Power
Company, et al.

February 13, 1985

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of)
)
DUKE POWER COMPANY, et al.)
)
(Catawba Nuclear Station,)
Units 1 and 2))

Docket Nos. 50-413
50-414

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I hereby certify that copies of "Opposition of Duke Power Company, et al. To 'Brief of Appellants Palmetto Alliance and Carolina Environmental Study Group'" in the above captioned matter have been served upon the following by deposit in the United States mail this 13th day of February 1985:

Alan S. Rosenthal, Chairman
Administrative Judge
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Chairman
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Thomas S. Moore
Administrative Judge
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

George E. Johnson, Esq.
Office of the Executive Legal
Director
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Howard A. Wilber
Administrative Judge
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Albert V. Carr, Jr., Esq.
Duke Power Company
P.O. Box 33189
Charlotte, North Carolina 28242

Chairman
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Richard P. Wilson, Esq.
Assistant Attorney General
State of South Carolina
P.O. Box 11549
Columbia, South Carolina 29211

Robert Guild, Esq.
Attorney-at-Law
P.O. Box 12097
Charleston, South Carolina 29412

Palmetto Alliance
2135 1/2 Devine Street
Columbia, South Carolina 29205

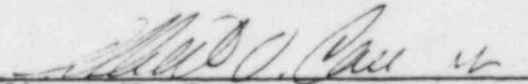
Docketing and Service Section
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Jesse L. Riley
854 Henley Place
Charlotte, North Carolina 28207

Karen E. Long, Esq.
Assistant Attorney General
N.C. Department of Justice
Post Office Box 629
Raleigh, North Carolina 27602

Don R. Willard
Mecklenburg County
Department of Environmental
Health
1200 Blythe Boulevard
Charlotte, North Carolina 28203

Bradley Jones, Esq.
Regional Counsel,
Region II
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555


Albert V. Carr, Jr.