ORAL ARGUMENT SCHEDULED FOR SEPTEMBER 5, 2002

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IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Nos. 01-1073 and 01-1246 (Consolidated)

ORANGE COUNTY, NORTH CAROLINA,

Petitioner,

v.

U.S. NUCLEAR REGULATORY COMMISSION
and the UNITED STATES OF AMERICA,

Respondents, and

CAROLINA LIGHT & POWER COMPANY,

Intervenor-Respondent.

ON PETITION TO REVIEW TWO ORDERS OF THE
U.S. NUCLEAR REGULATORY COMMISSION

# BRIEF FOR THE FEDERAL RESPONDENTS


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June 17, 2002

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES.

1. **Parties and Amici**: the parties to this case are Orange County, North Carolina (Petitioner), the U.S. Nuclear Regulatory Commission and the United States of America (Respondents), and Carolina Power & Light Company an Intervenor. There are no amici.

2. **Rulings Under Review**: This case challenges two rulings by the Atomic Safety and Licensing Board of the U.S. Nuclear Regulatory Commission. The two decisions are LBP-00-19, 52 NRC 85 (2000) and LBP-01-09, 53 NRC 239 (2001), review denied, CLI-01-11, 53 NRC 370 (2001), which approved the issuance of an amendment to an NRC license. The case also challenges a decision by the NRC Staff to issue the disputed amendment on an immediately effective basis. See 65 Fed. Reg. 82405 (Dec. 28, 2000).

3. **Related Cases**: There are no related cases either previously or currently pending before this Court or any other court.

Respectfully submitted,

_____

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June 17, 2002

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## GLOSSARY OF TERMS AND ACRONYMS

1. NRC — U.S. Nuclear Regulatory Commission.

2. CP&L — Carolina Power & Light Company.

3. AEA — Atomic Energy Act.

4. NSHC — No Significant Hazards Considerations.

5. NWPA — Nuclear Waste Policy Act.

6. NEPA — National Environmental Policy Act.

7. EIS — Environmental Impact Statement.

8. NUREG or NUREG/CR — A general heading indicating an NRC technical document. These documents are generally prepared by the NRC Staff, but may be prepared by a contractor, such as a national laboratory operated by the U.S. Department of Energy.

9. GEIS — Generic Environmental Impact Statement. In this case, NUREG-057, a generic study about the environmental impacts of the storage of spent fuel, issued in 1979.

10. TR — Transcript of Oral Argument held December 7, 2000, in Raleigh, North Carolina.

11. Subpart K — The Section of 10 C.F.R. Part 2 of the Commission's Regulations that provides procedures for hearings for license amendments issued under the provisions of the Nuclear Waste Policy Act.

12. SER — Safety Evaluation Report. Generally, an NRC Staff document reviewing any technical issues surrounding a particular action. In this case, the NRC Staff document analyzing the decision to issue the requested amendment on an "immediately effective" basis, subject to the outcome of the hearing.

13. Pet. Br. — Petitioner's Brief.

14. OC Request — Orange County's Request for Admission of Late-Filed Contentions (January 31, 2000).

15. NUREG-1570 — A study performed by the NRC Staff to determine the potential risks of a containment bypass resulting from a ruptured tube in a steam generator at a nuclear plant. The study used the Surry Nuclear Plant as a model.

16. ARCON96 — The 1996 version of a computer code developed by the Pacific Northwest National Laboratory under contract with the NRC. The code provides a model for calculating radiation concentrations in the vicinity of buildings after a hypothetical plant accident. The first version of the code was ARCON95.

17. NUREG/CR 6331 — The technical document issued in 1995 with instructions on the use of the original code, ARCON95. In 1996, Pacific Labs issued Rev. 1 to provide instructions on the use of ARCON96. In this case, the parties have cited to Rev. 1 because ARCON96 is the code currently in use.

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

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| ORANGE COUNTY, NORTH CAROLINA,<br><br>Petitioner,<br><br>v.<br><br>NUCLEAR REGULATORY COMMISSION and THE UNITED STATES OF AMERICA,<br><br>Respondents. | ) | Nos. 01-1073 & 01-1246<br>(Consolidated) |

# BRIEF FOR THE FEDERAL RESPONDENTS

## JURISDICTIONAL STATEMENT

These two consolidated petitions for review challenge two orders of the U.S. Nuclear Regulatory Commission ("NRC") in a reactor license amendment proceeding. The two agency orders are "final orders" for purposes of judicial review. Orange County, North Carolina, is the petitioner. It filed a timely petition for review within sixty days of each final NRC order. See Pet. Br. at 1. Thus, Orange County has properly invoked this Court's jurisdiction under the Hobbs Act, 28 U.S.C. §2342(4), and the Atomic Energy Act ("AEA") of 1954, as amended, 42 U.S.C. §2239(b).

## STATUTES AND REGULATIONS

Relevant statutes and regulations are included in the addendum to this brief.

## QUESTIONS PRESENTED

1. The NRC's procedural rules require those seeking hearings to come forward with detailed and fact-based contentions. In an NRC license amendment proceeding seeking expansion of a nuclear power plant's spent fuel pools, Orange County filed a contention on general risks of a catastrophic fire in spent fuel pools, but used only a particular seven-step scenario to show a more-than-speculative potential for such a fire. **Was it reasonable for the Commission and its Licensing Board to focus on the County's specific seven-step accident scenario as the crux of its contention?**

2. Under established law, an agency need not prepare an environmental impact statement to discuss remote and speculative possibilities. To show that Orange County's hypothetical seven-step accident scenario is very unlikely, thus not requiring an EIS, the NRC staff submitted expert-prepared probability evidence -- which the County contested, but the Commission and its Licensing Board credited. **Did the NRC adjudicatory decision finding the seven-step scenario remote and speculative properly allocate the burden of proof and rest on adequate factual support in the record?**

3. By statute, if the NRC finds that a reactor license amendment raises "no significant hazards consideration" the NRC may issue the amendment immediately, notwithstanding pending agency hearings. Using a three-part technical test to find "no significant hazards consideration," and over the objection of Orange County, the NRC staff issued an amendment despite a then-ongoing agency hearing on the County's hypothetical accident scenario. **Should the NRC's finding that the proposed amendment involved "no significant hazards consideration" be upheld?**

## STATEMENT OF THE CASE

A. Nature of the Case.

In 1998, the Carolina Power & Light Company (“CP&L”) requested an amendment to its license for the Shearon Harris Nuclear Power Plant that would permit the plant to expand its capacity to store spent nuclear fuel in onsite spent fuel pools. The Board of Commissioners of Orange County, North Carolina ("Orange County"), challenged that request on several safety and environmental grounds. Orange County asked for a hearing before the Commission[1] on the amendment and the request was granted. During the hearing process, the NRC Staff issued the amendment and made it immediately effective, subject to the outcome of the hearing, upon making the finding required by statute that the amendment raised “no significant hazards consideration” (“NSHC”).

The County petitioned the Commission to vacate the Staff’s issuance of the amendment. The Commission summarily rejected the petition as not allowed by the NRC’s regulations, but on its own motion directed the Staff to respond to specific requests for information on its NSHC finding and stayed the Staff decision in part. The Commission took no further action because the NRC’s hearing board soon approved the amendment. The Staff’s NSHC finding is the agency action challenged in No. 01-1073.

Shortly after the Staff made its NSHC determination and issued the amendment, a 3-judge tribunal of the NRC’s Atomic Safety and Licensing Board Panel ("Licensing Board") approved final issuance of the amendment, finding -- pursuant to the process

[1] We will use “NRC” to refer to the agency as a whole and “Commission” when referring to the five-member body appointed by the President to administer the agency. We will use the term “NRC Staff” when referring to the technical staff as a party in the hearing.

laid down by Congress in the Nuclear Waste Policy Act -- that a hypothetical seven-step accident of concern to Orange County was remote and speculative and did not require evaluation in an environmental impact statement. The Board previously had rejected the County's other claims. Hence, the Board authorized issuance of the amendment.

Orange County petitioned the Commission for review of the Licensing Board decision and for a stay of the Licensing Board order approving the issuance of the amendment, but the Commission denied both the petition for review and the stay request. The NRC adjudicatory decision authorizing the issuance of the amendment is the agency order challenged in No. 01-1246.

B. Proceedings Before This Court.

Shortly after filing its challenge to the NRC Staff's "no significant hazards consideration" determination (No. 01-1073), Orange County agreed that its lawsuit should be held in abeyance pending further agency proceedings. This Court issued an abeyance order. See Order of April 2, 2001, in Docket 01-1073. After Orange County filed No. 01-1246 -- its challenge to the adjudicatory decision approving the amendment -- the County asked this Court to stay the issuance of the amendment pending appeal and to expedite proceedings. This Court denied both requests. See Order of June 29, 2001, in Docket No. 01-1246. Subsequently, Orange County moved this Court to re-activate No. 01-1073 and consolidate it with No. 01-1246. The NRC and CP&L, which had intervened in both proceedings, opposed the motion and cross-moved to dismiss No. 01-1073 as not ripe for adjudication. This Court granted Orange County's motion to re-activate No. 01-1073 and to consolidate it with No. 01-1246, and referred the Respondents' motion to dismiss to the merits panel. See Order of October 22, 2001, in Docket No. 01-1073.

C. Statutory and Regulatory Framework.

1. The NRC Hearing Process.

Section 189a(1)(A) of the Atomic Energy Act ("AEA") of 1954, as amended, 42 U.S.C. §2239(a)(1)(A), provides that members of the public whose interest is affected by a proposed NRC licensing action have a right to a hearing on that action. Most licensing actions involving nuclear power plants are conducted under the formal trial-type procedures of 10 C.F.R. Part 2, Subpart G. As part of the hearings, the parties may challenge an NRC staff decision not to prepare an Environmental Impact Statement ("EIS") for the proposed licensing action. See 10 C.F.R. §51.104(b). But the National Environmental Policy Act ("NEPA"), 42 U.S.C. §4321, et seq., does not require an EIS for "remote and speculative" accidents or impacts. See Carolina Environmental Study Group v. United States, 510 F.2d 796, 800 (D.C. Cir. 1975). Accord San Luis Obispo Mothers for Peace v. NRC, 751 F.2d 1287, 1300-01 (D.C. Cir. 1984), aff'd on rehearing en banc, 789 F.2d 26 (D.C. Cir. 1986), cert. denied, 479 U.S. 923 (1986).

A party seeking to intervene in an NRC hearing must submit at least one "contention," i.e., an issue to litigate. See 10 C.F.R. §2.714(b)(2). That contention must be supported by a "brief explanation" of its "bases," i.e., concrete examples or other support of the issue, 10 C.F.R. §2.714(b)(2)(i); "a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely," 10 C.F.R. §2.714(b)(2)(ii); and "[s]ufficient information ... to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. §2.714(b)(2)(iii). Litigation of a contention is limited in scope to the specific bases that are admitted. See Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988); Illinois Power Co. (Clinton Power Station, Unit 1), LBP-81-61, 14 NRC 1735, 1737 (1981).

2. Issuance of License Amendments During Hearings.

Section 189a(2)(A) of the AEA provides that the NRC "may issue and make immediately effective any amendment" to reactor operating licenses "upon a determination by the Commission that the amendment involves no significant hazards consideration, notwithstanding the pendency before the Commission of a request for a hearing from any person." 42 U.S.C. §2239(a)(2)(A). This provision was added in 1983 in the so-called "Sholly Amendments." See Pub. L. No. 97-415, 96 Stat. 2067 (1983), 1982 U.S. Code Cong. & Ad. News 3598-3600, 3606-3609. The post-issuance NRC licensing hearing considers whether the amendment is lawful and may continue in effect.

The Commission has adopted implementing regulations providing that a proposed amendment involves "no significant hazards considerations" if "operation of the facility in accordance with the proposed amendment would not: (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) Involve a significant reduction in a margin of safety." 10 C.F.R. §50.92(c). NRC Staff decisions making "no significant hazards consideration" findings are not appealable to the Commission. See 10 C.F.R. 50.58(b)(6). But they are subject to judicial review. See San Luis Obispo Mothers for Peace v. NRC, 799 F.2d 1268 (9th Cir. 1986).

3. The Nuclear Waste Policy Act.

In 1983, Congress passed the Nuclear Waste Policy Act ("NWPA"). See 42 U.S.C. §10101, et seq. Among other things, the NWPA sought to "encourage and expedite the effective use of existing storage facilities and the addition of needed new storage capacity at the site of each civilian nuclear power reactor." See 42 U.S.C. §10151(a)(2). To advance this goal, Congress added an

expedited process for conducting a hearing on amendments to expand spent fuel storage capacity at a nuclear plant. The NWPA process permits any party to request an "oral argument," which triggers a summary proceeding consisting of discovery, submission of sworn testimony or affidavits, and sworn written summaries of facts, data, and arguments on which the party intends to rely. See 42 U.S.C. § 10154(a). The Commission has issued rules implementing the NWPA-prescribed process. See 10 C.F.R. Part 2, Subpart K (§§2.1101-2.1117).

Under the NWPA, after the "oral argument" process, the Commission (ordinarily acting through a licensing board) decides whether a formal evidentiary hearing is necessary to resolve key fact disputes "with sufficient accuracy."

> At the conclusion of any oral argument under subsection (a) of this section, the Commission shall designate any disputed question of fact, together with any remaining questions of law, for resolution in an adjudicatory hearing only if it determines that -- (A) there is a genuine and substantial dispute of fact which can only be resolved with sufficient accuracy by the introduction of evidence in an adjudicatory hearing; and (B) the decision of the Commission is likely to depend in whole or in part on the resolution of such dispute.

42 U.S.C. § 10154(b) (emphasis added). Similarly, Commission rules require agency licensing boards, after the oral argument, to "promptly ... [d]ispose of any issues of law or fact" except where "sufficient accuracy" demands a formal evidentiary hearing. See 10 C.F.R. § 2.1115(a) & (b).

D. Spent Fuel Storage.

Controlled nuclear fission within the reactor of a nuclear power plant produces heat, which in turn produces steam that drives the turbines generating electricity. Periodically, as fissile material is consumed and radioactive waste products build up within the

fuel assemblies, the plant’s operators replace the "spent" fuel with new assemblies. Freshly discharged spent fuel is "hot," both thermally and radioactively.

The reactor operators transfer the spent fuel from the reactor core through a canal into a steel-reinforced concrete water basin, the "spent fuel pool," where deep water provides both cooling and radiation shielding. Spent fuel can be stored safely for an indefinite period in

spent fuel pools. It was originally expected, however, that freshly discharged fuel would be stored for only a few years, until it cooled sufficiently to be transferred elsewhere either for reprocessing (to recover unconsumed fissile material) or permanent disposal. But the reprocessing option was not pursued, and facilities for permanent disposal have not yet been established. As nuclear plants continued to operate spent fuel has accumulated, requiring the plants to increase their onsite storage capacity in order to continue generating electricity.

Generally this has been accomplished by changing to denser storage racks in the existing spent fuel pools, but the limits of these more efficient storage methods are being approached at some plants.

The NRC has studied spent fuel pools, and their relative risks, for many years. In 1979 the agency issued a Generic Environmental Impact Statement, NUREG-0575, on spent fuel storage. See also the NRC's "Regulatory Analysis for Resolution of Generic Issue 82, 'Beyond Design basis Accidents in Spent Fuel Pools,'" NUREG-1353 (April, 1989); and "Final Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants," NUREG-1738 (Feb. 2001). In addition, over the years, the Commission has considered many amendments requested by reactor licensees who, like CP&L in this case, sought to increase the capacity of their spent fuel storage pools. See, e.g., Northeast Nuclear Energy Co., (Millstone Nuclear Power Station, Unit 3), CLI-01-10, 53 NRC 353, 360, 368 (2001). In fact, the vast majority of operating reactor licensees have expanded their spent fuel storage capacity.

E. The Shearon Harris Proceeding.[2]

1. The Amendment Request.

CP&L owns and operates the Shearon Harris Nuclear Power Plant under a license issued by the NRC. Originally, CP&L planned to build four units at the Harris site, which is located in central North Carolina, but canceled Units 3 and 4 in 1981 and

[2] We draw our description of the facts from the final Commission decision in this case, CLI-01-11, 53 NRC 370 (2001) (JA 1), and decisions by the Licensing Board. The decisions and other important documents in the record are reproduced in the Joint Appendix ("JA").

canceled Unit 2 in 1983. Prior to the cancellation of the last three units, however, CP&L had already completed construction of all four spent fuel pools (designated as Pools A, B, C, and D) and also had completed construction of the spent fuel pool cooling and cleanup systems for Pools A and B.

These pools are designed to store spent fuel safely after it is removed from the reactor. Prior to the amendment at issue here, the Harris license authorized the storage of spent fuel only in Pools A and B, including the storage of spent fuel assemblies both from Harris and from CP&L's other NRC-licensed facilities, Robinson Unit 2, and Brunswick Units 1 and 2. Pools A and B are licensed to hold 3,669 fuel assemblies.

In recent years, Pools A and B have been filled almost to capacity (as have the pools at the Robinson and Brunswick plants), due in part to delays in the development of a national repository to dispose of spent fuel from American nuclear power plants. See generally Indiana Michigan Power Co. v. DOE, 88 F.3d 1272 (D.C. Cir. 1996). On December 23, 1998, CP&L applied for an amendment to the Harris license that would (1) allow completion of the cooling and cleanup systems to serve Pools C and D, and (2) authorize CP&L to store spent fuel in both (then-unopened) pools. The NRC published notice of the requested amendment, together with a notice of an opportunity for a hearing and a proposed finding that issuing the amendment involved no significant hazards considerations. See 64 Fed. Reg. 2237 (Jan. 13, 1999) (JA 134).

2. The Administrative Hearing.

Orange County filed a timely request for a hearing, and the Commission referred the request to the Licensing Board. In accordance with the NWPA and NRC regulations, CP&L submitted a timely request for an "oral argument"-type hearing as set out in 10 C.F.R. Part 2, Subpart K.

(a) Initial Licensing Board Proceedings.

The Licensing Board granted Orange County's request for a hearing and admitted two contentions challenging the proposed amendment on technical and safety grounds. See LBP-99-25, 50 NRC 25 (1999).[3] At the same time, the Board also dismissed another technical-safety contention as inadmissible. Id. at 32-35. In admitting two of the three contentions, the Board accepted the wording of the bases of the County's contentions as proposed by CP&L. Id. at 32, 35. The Board also dismissed the County's five environmental contentions as premature. Id. at 38-39. (The NRC Staff had not yet completed its environmental review or issued an environmental assessment.)

The first admitted safety contention challenged the sufficiency of measures proposed by CP&L to control the criticality of the spent fuel that would be stored in Pools C and D, and the second challenged steps taken by CP&L to monitor and preserve piping in Pools C and D that had been left in place after abandonment of construction in the early 1980's. Id. at 35-38. After discovery, the submission of affidavits and other documents, and oral argument, the Board found that additional proceedings were not necessary to resolve the two safety contentions and rejected both on the merits. See LBP-00-12, 51 NRC 247, 282-83 (2000). The Commission later turned down Orange County's petition to review the Board's handling of the safety contentions. See CLI-01-11, 53 NRC at 390-91 (JA 11). Orange County has not pursued those contentions in this Court.

(b) Orange County's EIS Contention (EC-6).

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[3] Decisions of the Licensing Board are designated by an "LBP" heading; decisions by the Atomic Safety and Licensing Appeal Board ("Appeal Board"), no longer in existence but formerly the NRC's intermediate appellate tribunal, are designated by the heading "ALAB;" and decisions by the Commission itself are designated by a "CLI" heading.

Meanwhile, the NRC Staff issued an Environmental Assessment ("EA"), finding that the requested amendment involved "no significant impact" to the environment and did not require preparation of an EIS. See 64 Fed. Reg. 71514 (Dec. 21, 1999) (JA 122). The EA prompted Orange County to submit four "environmental" contentions, numbered EC-1 through EC-4,

challenging that decision. See generally Request for Admission of Late-Filed Environmental Contentions ("OC Request") (Jan. 31, 1999) (JA 1681). The Licensing Board re-numbered the contentions to continue the sequence of environmental contentions that had been dismissed earlier in the proceeding. Contention EC-1, now renumbered EC-6, has become the focus of Orange County's petition for review in this Court. EC-6 contended that the NRC Staff was required to prepare an EIS describing the impact of an accident at the Harris pools.[4] OC Request at 1-16 (JA 1681-96). In support of this contention, the County provided a report by its expert, Dr. Gordon Thompson, on risks associated with the spent fuel storage pools at Harris (JA 1708).

The County's Request started with a page and a half of general discussion, claiming that the proposed amendment would increase the risk of an accident at the Harris plant. See OC Request at 1-3 (JA 1681-83). Next, under the heading "Basis," it contained a 13- page general narrative discussing various requirements, risks, and options. Id. at 3-16 (JA 1683-96). It alleged that the NRC's EA had incorrectly minimized the incremental risk arising from the operation of Pools C & D, and asserted that "new information," not considered in the NRC's earlier spent fuel pool reviews, showed that a loss of cooling water from a pool using high-density racks could result in a catastrophic fire that could spread to other elements stored in the pool. Id. at 8 (JA 1688).

A loss of water, and resulting fire, is not, the Request said, "remote and speculative." Id. Its trigger, according to the Request, would be a reactor core accident, with a containment bypass, rendering workers unable to restore water to the drained

[4]The other environmental contentions are not at issue in this case.

spent fuel pools. Id. ("For example, degraded-core accident [in the reactor] with a containment failure or bypass, would almost certainly lead to interruption of cooling of the Harris pools, followed by loss of water from the pools through evaporation.") The County's expert, Dr. Thompson, estimated the probability of the degraded core accident he anticipated as the trigger point for the loss of water and the consequent spent fuel pool fire as approximately 1 in 100,000. See Report at 8 (JA 1721).

The County also discussed various other factors and issues underlying its claim. OC Request at 8-12 (JA 1688-92). First, the County stated that the additional number of fuel assemblies in the plant's pools could, in the event of an accident causing a loss of pool water, lead to "a release [that] would yield consequences that would be significant in their own right." Id. at 12 (JA 1692). Second, the County argued that CP&L was storing the added fuel assemblies closer together in Pools C & D than in Pools A & B and that in the event of an accident causing a loss of pool water, a pool fire would be more likely than in the originally licensed pools. Id. at 13 (JA 1693). Third, the County expressed concern over the use of administrative rather than physical criticality control measures. Id. And, finally, the County alleged that the "large inventory and mode of management of spent fuel at the Harris plant also significantly increase[s] [sic] the opportunities for sabotage during transportation, handling, and storage of spent fuel." Id. at 14-15 (JA 1694-95).

(c) Responses of CP&L and the NRC Staff.

CP&L and the NRC Staff filed Responses opposing admission of the EIS contention (EC-6). In its Response, CP&L analyzed Orange County's explanation of the contention's bases and offered a more concise statement of those bases -- just as it

had restated the bases of Orange County's technical/safety contentions in the earlier portion of the proceeding. In a single sentence, CP&L restated the County's five-page discussion of the possibility of a catastrophic spent fuel pool fire as, in effect, a seven-step accident scenario:

> "(1) a 'degraded-core' reactor accident; (2) containment by-pass; (3) loss of spent fuel pool cooling and makeup systems; (4) extreme radiation doses precluding equipment access; (5) inability to restart any pool cooling or makeup systems due to extreme radiation doses; (6) loss of most or all pool water through evaporation; and (7) initiation of an exothermic zirconium oxidation reaction [i.e., a "fire"] in Pools C and D."

CP&L Response (Mar. 3, 2000) at 9-10 (JA 1595-96). Orange County later "agree[d] that this restatement" is a reasonable summary of the postulated accident scenario with the exception that step (2) should be reworded "containment failure or bypass" and step (4) should be reworded "extreme radiation doses precluding personnel access." See Orange County Reply at 8.

Both CP&L and the NRC Staff opposed admission of the contention. CP&L argued that the seven-step scenario was inadmissible because the accident described was a "beyond design basis" accident, i.e., the accident was considered so improbable that the Commission did not require its consideration in plant design. See CP&L Response at 9 (JA 1595). The Staff stressed, among other things, that Dr. Thompson had not provided "any analysis or basis" for his conclusion that a loss of pool water was "an almost certain outcome" of the postulated accident. See NRC Staff Response at 15 (JA 1571). As for Orange County's other EIS claims, such as its general references to sabotage and to "new information" about "increased risk," CP&L and the NRC Staff pointed out, among other things, that the County had not provided a specific analysis with a specific accident scenario that would bring these concerns into play. See id. at 23-26 (JA 1579-82); CP&L Response at 16 (JA 1601).

(d) The Board Decision Admitting the EIS Contention (EC-6) for Hearing.

After reviewing the County's Request, the Oppositions by the NRC Staff and CP&L, and the County's Reply, as well as the expert opinions and other supporting documentation, the Licensing Board admitted the EIS contention (EC-6). See LBP-00-19, 52 NRC 85, 94-99

(2000) (JA 95-97). The Board found the "crux" of the contention to be the County's claim that the seven-step accident it had hypothesized was sufficient to trigger an agency obligation to prepare an EIS.

> [The County] discusses a number of different elements that it asserts provide the basis for this contention .... In the Board's view, however, the crux of the contention, and the focus of our consideration as to whether it meets the specificity and basis requirements of section 2.714, is whether the accident proposed by [the County] in basis F.1 of the contention has a probability sufficient to provide the beyond-remote-and-speculative "trigger" that is needed to compel preparation of an EIS relative to this proposed licensing action.

Id. at 95 (JA 95). The Board then considered whether that accident scenario, as it had been reformulated by CP&L with the County's agreement, provided an "adequate basis to support further Board consideration of this issue." Id.

First, the Board looked to guidance offered by the Commission in two earlier decisions involving a NEPA question in a spent fuel pool expansion case. See id. at 95-97 (JA 95-96), citing Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), CLI-90-04, 31 NRC 333 (1990) and Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Station) CLI-90-07, 32 NRC 129, 132 (1990). In those decisions, as the Board stressed, the Commission insisted on an actual probability analysis as part of the "remote and speculative" NEPA inquiry:

> If the Appeal Board finds that an accident probability on the order of $10^{-4}$ per reactor year is appropriate for the entire accident sequence postulated in this contention, the case should be returned to the Commission for further review. Otherwise, the Appeal Board should modify or confirm its judgment as to the remote and speculative nature of the accident on the basis of the accident probability derived on remand.

LBP-00-19, 52 NRC at 96 (JA 96), quoting Vermont Yankee, CLI-90-04, 31 NRC at 335-36 (citations omitted).[5]

The Board then applied the Commission's probability approach to the County's EIS contention (EC-6). The Board noted that, although the Staff and CP&L had challenged many parts of the County's bases, the County had submitted information that indicated the probability of the seven-step scenario was on the order of 1E-05 per reactor year (1 in 100,000). The Board found this was "a figure that under the Commission's guidance seemingly should not be dismissed automatically as per se 'remote and speculative.'" LBP-00-19, 52 NRC at 97 (JA 96). Accordingly, the Board admitted the contention insofar as it related to the seven-step scenario. Id. at 98 (JA 97).

The Board specifically declined to consider parts of the EIS contention (EC-6). First, the Board held that the County's general allegation that the amendment created an additional risk of sabotage was barred by a prior Commission decision, which had been affirmed in relevant part by a federal court. See LBP-00-19, 52 NRC at 97-98 (JA 96-97). Second, the Board rejected the

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[5]In dismissing the Vermont Yankee proceeding later (as moot), the Commission pointed out that it expected future decisions on whether hypothetical accidents are "remote and speculative" to be based on the analysis of the probabilities of the accidents postulated.

> Our opinion makes clear that future decisions that accident scenarios are remote and speculative must be more specific and more soundly based on the actual probabilities and accident scenarios being analyzed.

LBP-00-19, 52 NRC at 97 (JA 96), quoting Vermont Yankee, CLI-90-07, 32 NRC at 132.

County's concern that CP&L was increasing risks by using "administrative measures" for criticality control. The Board noted that "CP&L's planned use [of these measures] is permitted by General Design Criterion 62" and "does not, in and of itself trigger

the need for an EIS." LBP-00-19, 52 NRC at 98, n.2 (JA 97). But the Board did not explicitly rule out any other portions of the County's bases.

> Whether, and to what extent, use of these control measures has any relevance to the probability calculations at issue here is a matter for resolution as part of the further litigation regarding Contention EC-6. The same is true for the question of the heat load for pools C and D, which seemingly includes an associated legal issue concerning appropriate project segmentation relative to NEPA."

Id.

(e) The Board Decision Rejecting the EIS Contention (EC-6) on the Merits.

After discovery, including depositions of the parties' respective experts, all parties submitted extensive written analyses of the contention. On December 7, 2000, the Licensing Board held an oral argument on the EIS contention (EC-6) in Raleigh, North Carolina. See Transcript of Oral Argument ("TR") at 443, et seq (JA 171). The Board was composed of Presiding Judge Paul Bollwerk, an attorney, and Judges Peter Lam, a nuclear engineer, and Thomas Murphy, a health physicist. See TR 450-51 (JA 175-76).

The Board rejected Orange County's EIS contention (EC-6) on its merits. The Board found that the NRC Staff and CP&L had carried their burden to demonstrate that the accident scenario at issue in the contention was remote and speculative and that the County had failed to demonstrate that there was a "genuine and substantial dispute of fact" that could only be resolved with "sufficient accuracy" through further adjudicatory proceedings (i.e. a formal evidentiary hearing). See LBP-01-09, 53 NRC 239, 271 (2001) (JA 30).

The Board initially made a number of threshold observations. First, the Board noted

that while the County relied on the views of Dr. Thompson, CP&L had conducted a probabilistic risk analysis specifically prepared for this litigation, known as the ERIN Report, and NRC Staff experts had prepared their own probability analysis by evaluating existing

probabilistic risk assessment ("PRA")-related documents. See id. at 246-47 (JA 18). Second, while indicating that the County had the burden under the Subpart K process of showing that a formal evidentiary hearing was necessary, the Board held that the Staff and CP&L had the ultimate burden of proof on the merits:

> We agree with [Orange County] that as the proponent of the need for an evidentiary hearing it bears the burden of establishing that need, but the Staff bears the ultimate burden to demonstrate its compliance with NEPA in its determination that an EIS was not necessary relative to the ... expansion request.

Id. at 249 (JA 19). Third, the Board reviewed challenges to Dr. Thompson's status as an expert witness and decided to accept his testimony based upon his general educational background and his studies of spent fuel storage issues. Id. at 251 (JA 20).

Turning to the merits of the case, the Board discussed at length each step of Orange County's proposed accident scenario and the material submitted on the record dealing with it. See id. at 251-69 (JA 20-29). At each step, the Board described the particular step in the accident sequence and then discussed in detail (1) Orange County's arguments regarding that step, (2) CP&L's arguments, (3) the NRC Staff's arguments, and (4) the Board's own resolution of disputed points. See id. at 253-66 (JA 21-28).

After explaining the method of calculations and providing a table comparing the three contrasting analyses, and after weighing the evidence, the Board found the NRC Staff's analysis persuasive. See id. at 267 (JA 28). The Board agreed with the Staff that the probability of Orange County's hypothetical accident was, "conservatively," 2 occurrences in 10 million reactor years "or less." See id. The Board concluded that this small probability showed that Orange County's hypothetical accident was indeed "remote and speculative," meaning

that NEPA did not require the NRC to prepare an EIS describing the consequences of the accident. See id. at 267-69 (JA 28-29). The Board also found that there was no "genuine and substantial dispute" that "can only be resolved with sufficient accuracy" at a further hearing. See id. at 270-71 (JA 30). The Board therefore dismissed the hearing, leaving the previously issued amendment in place. Id.

(f) Commission Review and Decision.

Orange County filed a petition for Commission review (JA 139) of the three major Licensing Board decisions, LBP-00-12, LBP-00-19, and LBP-01-09. The County challenged, inter alia, (1) the Board's decision in LBP-00-19 to limit the EIS contention (EC-6) to the seven-step accident scenario, and (2) the Board's decision in LBP-01-09 that the accident scenario postulated by the County was "remote and speculative." The County also asked the Commission to stay the amendment. The Commission denied both the petition for review and the stay request. See CLI-01-11, 53 NRC 370 (2001) (JA 1).

The Commission saw no merit in Orange County's claims (repeated in this Court) that the Board had construed the County's EIS contention (EC-6) too narrowly or that the Board had given too much credence to the Staff and CP&L experts and not enough to the County's. The Commission said that "its strict contention rule' required "detailed pleadings" and that the County had "offered no specific case for spent fuel pool accidents other than the seven-step scenario admitted by the Board." Id. at 390 (JA 11). As to the merits, the Commission found the "Board's explanation of its approach measured and persuasive," and saw "no basis for upsetting the Board's probability estimate." Id. at 387-89 (JA 9-10).

3. Issuance of the Amendment During the Hearing.

As noted above, the initial Federal Register Notice advised the public that the Staff proposed to issue the amendment on an "immediately effective basis" upon a finding that the amendment involved "no significant hazards consideration" ("NSHC"). Orange County submitted comments arguing that the Staff had not correctly applied the NSHC criteria (JA 1626). See 10 C.F.R. § 50.92(c).

On December 27, 2000, after the oral argument but before issuance of LBP-01-09, the Staff made a NSHC finding and then issued the amendment, subject to the results of the then-ongoing hearing. See 65 Fed. Reg. 82405 (Dec. 28, 2000) (JA 32). In addition to the Federal Register Notice, the Staff prepared and issued a 46-page Safety Evaluation Report, which, among other things, acknowledged Orange County's comments, and set out the Staff's analysis of the various technical issues considered during evaluation of the amendment application, including the Staff's analysis of the three technical NSHC factors set out in 10 C.F.R. §50.92(c) (JA 44-89). The Staff's issuance of the amendment allowed CP&L to complete some necessary construction and to store spent fuel in Pool C pending the outcome of the hearing.

Orange County immediately petitioned the Commission (JA 151) to overrule the NRC Staff and revoke the NSHC finding. The Commission summarily denied the petition, pointing out that NRC regulations explicitly prohibit such requests. See CLI-01-07, 53 NRC 113, 118 (2001) (JA 118); see 10 C.F.R. § 50.58(b)(6). But the Commission nonetheless on its own motion directed the Staff to respond to several specific Commission inquiries, including a request for information on Orange County's hypothetical seven-step accident, so that the Commission could determine whether to exercise its inherent supervisory authority to revoke or modify the Staff's decision. See id. at 118-19 (JA 121). In addition, the Commission stayed the amendment in part. It ordered CP&L not to store any spent fuel under the amendment until either the Commission completed its review of the Staff's response to

the Commission inquiries or until the Licensing Board issued a merits decision approving the requested amendment. See id. at 119 (JA 121).

The Staff later filed a brief answering the questions in the Commission's order. See NRC Staff Brief, filed on Feb. 28, 2001 (JA 150). But before the Commission had had a chance to review the Staff response and make a decision, the Licensing Board issued its merits decision dismissing the proceeding and authorizing the issuance of the license amendment. Thus, as the Commission later said, its review of the Staff's NSHC brief became "inconsequential" because the NSHC finding was no longer necessary for issuance of the license. See CLI-01-11, 53 NRC at 381 n.1 (JA 6).

## SUMMARY OF ARGUMENT

Orange County argues (1) that the Licensing Board unreasonably limited the County's EIS contention (EC-6) to the County-proposed seven-step accident scenario, (2) that in considering the probability of the seven-step scenario, the Board unlawfully shifted the burden of proof away from the NRC Staff and did not adequately take account of the County's challenge to the Staff approach, and (3) that the NRC Staff should not have issued the amendment before the hearing process was completed. None of the County's arguments is persuasive.

1. Before the Licensing Board, the County submitted a contention (EC-6) claiming that NEPA required the NRC to prepare an EIS for the proposed amendment. As required, the County also submitted several bases or examples in support of that overall claim. However, the Board focused on only one of those bases for litigation -- a claim that the NRC should prepare an EIS to

consider a seven-step, beyond-design-basis accident that Orange County alleged could occur if the amendment were adopted. The remainder of the County's contention was overbroad and vague.

The Licensing Board reasonably did not accept the other bases for Contention EC-6 because those bases were not supported by sufficient specific information as required by the Commission's regulations. The County maintains that the Board should have allowed a hearing on the County's "new information" on the possible loss of cooling water and resulting fires in spent fuel pools. But it is evident from the record that those risks would come into play only in a scenario in which the Harris workers are denied access to a disabled spent fuel pool to maintain a safe water level -- an event (steps 4 and 5) occurring only in the County's seven-step scenario.

At bottom, the County alleged in detail no specific triggering mechanism, other than the degraded core reactor accident initiating the seven-step scenario, that would explain how a spent fuel pool catastrophe might happen. The Board reasonably found the seven-step scenario the "crux" of the County's contention.

2. The Licensing Board reasonably disposed of the admitted contention after receiving and considering the parties' evidence. During this proceeding, the Licensing Board, composed of a lawyer, a health physicist, and a nuclear engineer, reviewed numerous submissions consisting of complicated technical documents and mathematical computations and conducted a thorough and probing oral argument into the probability of the seven-step accident scenario proposed by the County. Proceedings of this nature are at the heart of the government's administrative process and reviewing courts owe significant deference to an administrative agency's ability

to conduct proceedings and reach decisions within the fields of its technical expertise. In sum, the Board's decision was hardly "arbitrary and capricious" by any meaning of that phrase and fully entitled to deference.

Furthermore, the Licensing Board did not impermissibly shift the burden of proof in reaching its decision. The NRC Staff had the ultimate burden of proof on the merits. It was required to show that the County's proposed accident scenario was "remote and speculative" for EIS purposes. The Board reasonably found that the Staff met its burden. The County had to meet a separate burden -- if, as it maintained below, it wanted to move forward beyond the Subpart K oral argument to a formal evidentiary hearing. To obtain such a hearing, the County was obliged to show a genuine and substantial dispute that could only be resolved with sufficient accuracy at a full evidentiary hearing.

In reviewing the parties' pleadings, the Licensing Board weighed the competing submissions, including the reports and affidavits of the parties' designated experts. Weighing this evidence required the Licensing Board to compare the competing studies. In the process, the Board reasonably noted where one side had advanced an argument or a point that was not countered by the other side. Merely making those observations, taken in context, does not support the County's argument that the Board "unlawfully" shifted the burden of proof to the County. The Board was competent to review the submissions and decide which one was more credible and technically acceptable.

Specifically, in reaching its decision, the Board did not, contrary to the County's view, err in its resolution of Step 5 (inability to restart cooling or makeup systems due to extreme radiation doses). First, the Board did not violate NEPA by allowing the Staff to avoid one environmental harm by assuming another environmental harm; namely, harm to workers who would be asked to restore

and/or maintain the water levels in the Harris pools during a radiological event. The supposed harm to the workers is itself "remote and speculative," for it would happen only after a series of events that are themselves unlikely, including a beyond design basis reactor accident and bypass or failure of the reactor containment. Second, the Board did not rest its conclusions on a CP&L analysis that was not submitted on the record. Instead, as is evident from the face of its decision, the Board rested its determination on an analysis completed and submitted by the NRC Staff.

3. It is not necessary for this Court to consider the County's final argument -- its challenge to the NRC Staff's "no significant hazards consideration" ("NSHC") finding and issuance of the amendment during the hearing process -- unless the Court remands the County's adjudicatory claims for further hearing. The NSHC issue makes a difference only if there is an ongoing hearing.

The County's NSHC argument, in any event, is not well-taken. The County first says that the NRC Staff ignored the County's comments on the NSHC issue. But a cursory glance at the Staff's decisional documents shows that this is not so; they refer explicitly to the County and discuss its comments. Moreover, the County's underlying position -- that admission of its EIS contention (EC-6) precluded a NSHC finding -- demonstrates a fundamental misreading of the Atomic Energy Act. Simply put, Congress explicitly authorized the agency to issue "any" amendment to an operating license on an immediately effective basis if the appropriate technical criteria are satisfied, regardless of whether the NRC has granted a hearing on the proposed amendment. Admission of a contention in an adjudicatory proceeding means nothing more than the petitioner has met the pleading standards to start the hearing process, not that the contention has been proven as correct. Moreover, Congress did not exempt any type of challenge to an amendment, such as a challenge based on NEPA, from the purview of the statute.

In actuality, even if this Court vacates the Licensing Board decision and remands the case for further adjudicatory proceedings, the County's NSHC argument is not ripe for review. The Commission had directed the Staff to respond to several specific questions and was prepared to consider whether to review the Staff's NSHC finding when the Board's final decision approving the amendment mooted the NSHC issue. If, contrary to our position in this case, this Court decides to order a further hearing process, the Commission will complete its consideration of the NSHC questions that it originally raised.

## ARGUMENT

Standard of Review.

Judicial review rests on the administrative record and the reasoning of the agency. This Court should uphold the agency decision if its "path may reasonably be discerned," Bowman Transportation, Inc., v. Arkansas-Best Freight Systems, Inc., 419 U.S. 281, 286 (1974), and if it finds "adequate support in the record." El Conejo Americano of Texas, Inc. v. DOT, 278 F.3d 17, 20 (D.C. Cir. 2002. See J.A. Jones Management Services v. FAA, 225 F.3d 761, 765 (D.C. Cir. 2000).

This case principally involves Orange County's challenge to the NRC's decision not to prepare an EIS for the CP&L spent fuel pool amendment. This Court's review of an agency decision not to issue an EIS (or a supplemental EIS) "is controlled by the arbitrary and capricious standard of [5 U.S.C.] §706(2)(A)." Marsh v. Oregon Natural Resources Defense Council, 490 U.S. 360, 375-76 (1989). Accord Davis v. Latschar, 202 F.3d 359, 369 (D.C. Cir. 2000) . The Supreme Court in Marsh stressed the narrowness of the arbitrary and capricious standard:

> in making the factual inquiry concerning whether the agency decision was "arbitrary and capricious," the reviewing court "must consider whether the decision was based upon a consideration of the relevant factors and whether there was a clear error of judgment." This inquiry must "be searching and careful, but the ultimate standard of review is a narrow one."

Marsh, 490 U.S. at 378, quoting Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 416 (1971). A "reviewing court is not to substitute its judgment for that of the agency." Exxon Co., U.S.A. v. FERC, 182 F.3d 30, 37 (1999) (en banc).

This case also involves a challenge to the NRC's interpretation of its own regulations. It is axiomatic that when considering the interpretation or application of agency regulations, a reviewing court's "ultimate criterion is the administrative interpretation, which becomes of controlling weight unless it is plainly erroneous or inconsistent with the regulation." Bowles v. Seminole Rock & Sand Co., 325 U.S. 410, 414 (1945). See also Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 359 (1989); A.J. McNulty & Co., Inc. v. Secretary of Labor, 283 F.3d 328, 331 (D.C. Cir. 2002).

Finally, this case involves a challenge to a merits decision on a highly technical issue in an agency administrative proceeding. Courts routinely defer to expert agencies' findings on such questions:

> resolution of this dispute involves primarily issues of fact. Because analysis of the relevant documents requires a high level of technical expertise, we must defer to the informed discretion of the responsible federal agencies.

490 U.S. at 377, quoting Kleppe v Sierra Club, 427 U.S. 390, 412 (1976). Accord Exxon Company, U.S.A. v. FERC, 182 F.3d at 37. See also FPC v. Florida Power & Light Co., 404 U.S. 453, 463 (1972) ("Particularly when we consider a purely factual question within the area of competence of an administrative agency created by Congress, and when resolution of that question depends on

'engineering and scientific' considerations, we recognize the relevant agency's technical expertise and experience, and defer to its analysis unless it is without substantial basis in fact.")

If anything, NRC technical decisions warrant greater than ordinary judicial deference because of their complex scientific nature:

> a reviewing court must remember that the Commission is making predictions, within its area of special expertise, at the frontiers of science. When examining this kind of scientific determination, as

opposed to simple findings of facts, a reviewing court must generally be at its most deferential.

Baltimore Gas & Electric Co. v. NRDC, 462 U.S. 87, 103 (1983). Accord Carstens v. NRC, 742 F.2d 1546, 1551, 1557 (D.C. Cir. 1984), cert. denied, 471 U.S. 1136 (1985). The bottom-line is that Orange County faces an uphill climb in persuading this Court to overturn the NRC's technical findings.

I. The Licensing Board Reasonably Limited The Basis for Orange County's EIS Contention (EC-6) To The County's Seven-Step Accident Scenario.

Orange County maintains that the Commission violated its own regulations and NEPA "by refusing to consider Orange County's entire [EIS] contention." See Pet. Br. at 30. But the Licensing Board and the Commission reasonably limited their inquiry to a seven-step accident sequence that Orange County itself proposed, the only specific scenario discussed in the contention that purported to show a more-than-speculative possibility of a previously unconsidered accident.[6] The remainder of the County's EIS contention (EC-6) -- a general critique of the NRC's understanding of the risks and consequences of spent fuel pool accidents -- was either too vague for NRC litigation or was subsumed by the County's seven-step accident claim.

[6] As both the Board and the Commission held, and as Orange County concedes, "remote and speculative" nuclear accidents do not trigger an obligation to prepare an EIS. See LBP-00-19, 52 NRC at 94-95 (JA at 95). The Board stressed that the Commission traditionally has looked to probability analysis to decide whether accident risks are remote and speculative for NEPA purposes. See id. at 97 (JA 96), citing Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-90-7, 32 NRC 129, 132 (1990).

We discuss these points in detail below. In considering whether the Board and the Commission misconstrued the County's contention, this Court does not, of course, exercise de novo oversight but simply considers whether the agency adjudicators -- who are closest to the parties and to the pleadings -- acted reasonably under the circumstances. See Commonwealth of Massachusetts v. NRC, 924 F.2d 311, 322-23 (D.C. Cir. 1991), cert. denied, 502 U.S. 899 (1991).

1. Initially, Orange County claims that the Board "did not ... even mention the other portions of the contention which charged that the EA was insufficient to address the overall probability of a spent fuel pool fire." See Pet. Br. at 30 (emphasis added). But that is simply untrue. The Board decision discussed the supposed EA defects explicitly, and indeed admitted them, at least to the extent that they had "any relevance to the probability calculation at issue here." LBP-01-09, 52 NRC at 93-95, 98 n.2 (JA 94-95, 97).[7] Moreover, the Board also admitted an "associated legal issue concerning the appropriate project segmentation relative to NEPA." Id. at 98 n.2 (JA 97).

Orange County is right, however, that the Board (with CP&L's help in restating the contention) focused on the seven-step scenario as the "crux" of the County's contention. The Board did so largely because the seven-step scenario was the only aspect of the contention that satisfied the Commission's requirement that contentions be pleaded with specificity and support.

[7] The Board rejected the County's claims that the possibility of sabotage and CP&L's use of "administrative controls" and "burnup credit" required an EIS. See LBP-00-19, 52 NRC at 97, 98, n.2 (JA 96, 97). The County's argument in this Court does not address those claims.

> In the Board's view, however, the crux of the contention, and the focus of our consideration as to whether it meets the specificity and basis requirements of section 2.714, is whether the accident proposed by [the County] in basis F.1 of the contention has a probability sufficient to provide the beyond-remote-and-speculative "trigger" that is needed to compel preparation of an EIS relative to this proposed licensing action.

LBP-01-09, 52 NRC at 95 (JA 95). On administrative appeal the Commission agreed with the Board that the seven-step scenario was the County's only specific claim:

> At the contentions stage of this litigation, Orange County offered no specific causes for spent fuel pool accidents other than the seven-step scenario admitted by the Board. Orange County cannot now transform vague references to potential spent fuel pool catastrophes into litigable contentions.

CLI-01-11, 53 NRC 370, 390 (2001) (JA 11).

The Board and the Commission were following the agency's contention-pleading rule, which insists on specificity and detail. See 10 C.F.R. § 2.714(b)(2). The current language of §2.714(b)(2) is the result of a 1989 amendment to the rule that raised the pleading standards for contentions.[8] Under the current rule, a party must present something more than simply a claim that might

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[8] See generally 54 Fed. Reg. 33168 (Aug. 11, 1989). On judicial review this Court upheld the then-new rule. See Union of Concerned Scientists v. NRC, 920 F.2d 50 (D.C. Cir. 1990). The Court, pointing to the new rule's enhanced specificity and detail requirements, said that the rule "perceptibly heightens the pleading standard." Id. at 53.

In recent years the Commission has insisted repeatedly on the necessity for detailed threshold contentions to trigger an agency hearing. See, e.g., Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358-59 (2001); Baltimore Gas & Elec. Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 348-49 (1998), petition for review denied sub nom. National Whistleblower Center v. NRC, 208 F.3d 256 (D.C. Cir. 2000), cert. denied, 531 U.S. 1070 (2001). When petitioners file such contentions, however, they are regularly admitted for hearing. See, e.g., Consolidated Edison Co. of New York (Indian Point , Units 1 and 2), CLI-01-19, 54 NRC 109 (2001); Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-12, 53 NRC 459 (2001).

The NRC case Orange County cites (Pet. Br. at 31) to justify the admissibility of its general critique of the NRC Staff's environmental approach -- Pacific Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-86-12, 24 NRC 1, 12 (1986), rev'd and remanded sub nom. San Luis Obispo Mothers for Peace v. NRC, 799 F.2d 1268 (9th Cir. 1986) -- was decided before the 1989 revision in the NRC's contention-pleading rule, and in any event did not consider the adequacy of particular hearing contentions.

survive a Rule 12(b) motion in federal courts. "Notice pleading" -- with particulars to be filled in later -- does not suffice. See Duke Power Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 338 (1999).

A party must not only state a contention with specificity, but must also support it with "facts or expert opinion" demonstrating a genuine dispute. "Open-ended or ill-defined contentions" are impermissible. See Dominion Nuclear Connecticut, CLI-01-24, 54 NRC at 358. As the Commission recently noted: "the Commission toughened its contention rule in a conscious effort to raise the threshold bar for an admissible contention and ensure that only intervenors with genuine and particularized concerns participate in NRC hearings." Duke Power, CLI-99-11, 49 NRC at 338.

A close reading of the record here, in particular "Orange County's Request for Admission of Late-Filed Environmental Contentions" (J.A 1681), confirms the Commission's criticism of the County's diffuse and imprecise basis -- apart from the seven-step scenario -- for its EIS contention (EC-6). The contention and its bases were long, rambling, and disjointed. The Board required help from the contention's opponents to extract something specific from it; namely, the seven-step scenario. The County's abstract discussion of pool water drainage and its attendant fire risks, unmoored to particular accident possibilities at the Harris plant, provided nothing tangible to litigate.[9] In offering its EIS contention (EC-6) the County itself stressed the seven-step sequence. The County simply did not elaborate on any other accident scenarios not already considered by the NRC that might plausibly lead to a pool fire after either full or partial uncovering of the spent fuel.

[9] The County alleged that there would be an "increment in the accident risk" from operation of the new Harris pools. See OC Request at 5 (JA 1685). But it did not give any specific probability of either the current risk or the alleged increase. If the current risk of an accident was very small, then an "incremental risk" would be very small as well. Cf. CP&L Opposition at 15 (JA at 1600). ("[T]wo times nothing is still nothing"). NRC contention rules require greater precision than this to proceed to hearing.

2. And indeed, no such scenarios are apparent, for reasons amply displayed in the record that are technical but not at all difficult to follow.[10] The water in a spent fuel pool carries away heat generated by radioactive decay in the fuel assemblies and also provides shielding from emitted radiation. As long as the spent fuel remains covered, there is no significant potential for environmental impacts. If the spent fuel pool cooling system fails, the water will begin to evaporate at a rate that depends on the age of the stored fuel assemblies, but in all cases the loss is slow. Several days (on the order of a week) must pass before the water drops to a level at which a fuel fire becomes a possibility. Thus there is adequate time for plant personnel to take any action necessary to restore and/or maintain water levels. Only a loss-of-cooling accident scenario in which personnel are somehow denied access to the pool for a long period can conceivably lead to a pool fire.

This remains true even in Dr. Thompson's model, based on supposed "new information," in which a not-quite-total loss of spent fuel pool water can create a higher risk of fire than compete evaporation. Regardless of whether the loss of water is partial or total, a major drop in water level must occur before the fuel is likely to ignite. Several days will pass after failure of spent fuel pool cooling before this loss will happen. Thus there is ample time for action to maintain safe water levels. Unless an accident scenario prevents access to the pools for a long period of time, a pool fire is not reasonably foreseeable either from total or partial loss of water. The only accident scenario the County offered in which access might be hindered was its seven-step sequence. The

[10] The technical assertions in this part of our brief derive from an affidavit by NRC Staff experts filed with the Licensing Board. See Affidavit of Gareth Parry, et al., filed Nov. 20, 2000, at 21-28, 62-69 (JA 437-44, 478-85).

County's "new information" regarding partial versus total loss of spent fuel pool water, see Pet. Br. at 31, therefore has no bearing on the Board's limiting the EIS contention (EC-6) to the seven-step scenario.

None of the most likely reasons why the spent fuel cooling system might fail involves denial of access. Loss of offsite power is perhaps the most likely cause of cooling failure, but it is only a temporary problem and in any case presents no access obstacles. The County needed a scenario involving denial of access, however unlikely that might be, to support its NEPA contention that pool accidents should be discussed in an EIS. Relying on its expert, Dr. Thompson, the County therefore proposed the very unlikely though not impossible initiating event of a degraded core accident at the Harris reactor (1) followed by a further unlikely event -- containment failure or bypass (2). These first two steps of what became the County's seven-step scenario might disable spent fuel pool cooling (3) and also, Dr. Thompson believed, disperse enough radioactive contaminants to preclude personnel access (4), thereby making the final progression to loss of water (6) and a pool fire (7) at least plausible. But evidence presented by the Staff and CP&L convinced the Licensing Board that Dr. Thompson had overestimated the likelihood these steps would occur and that the seven-step scenario was remote and speculative. See Discussion in Point II, infra.

Despite its present complaint that the Board looked only at the seven-step accident, the County's contention suggested no other accident scenario, plausible or otherwise, in which workers might be unable to restore and maintain spent fuel water levels in the ample time available before the water drops to a dangerous level. Throughout the contention one finds that the County's statements on a loss of cooling and a drop in spent fuel pool water are accompanied by statements like "[f]or example, a degraded-

core accident...with containment failure...." See, e.g., OC Request at 8 (JA 1688) (emphasis added).[11] The County never gives other specific or detailed examples, and none is readily imaginable. Thus the Licensing Board did not err when it made an entirely reasonable decision to litigate the County's EIS contention (EC-6) exclusively on the basis of the seven-step scenario. That scenario, or something very much like it, had to be plausible to justify a Board finding that the County's (and Dr. Thompson's) "new" concerns about spent fuel pool fires required an EIS.

3. A final point. Litigating the seven-step scenario question required of both the NRC Staff and CP&L a major effort to perform detailed probabilistic risk studies. These studies confirmed that the seven-step accident is at least a hundred times less likely than Dr. Thompson had estimated and can reasonably be regarded as remote and speculative. See Discussion in Point II, infra. The County then argued in its petition for review to the Commission that this seven-step scenario establishes only a "lower bound of probability" (a trivial observation). See Orange County's Petition for Review at 6, 7 n. 10 (JA 144, 145). Therefore, the County seems to believe, even though the County's proposed scenario had turned out to be remote and speculative, the Licensing Board should not have stopped there but should have gone on to consider other, unspecified scenarios because one of them might turn out to be more probable.

This is a "Heads we win, tails you lose" position. The County proposes an accident scenario and demands that the Staff and the applicant do a burdensome analysis (which the County lacks resources to perform) to determine its probability. If the analysis

[11] See also, id. at 10, 11, 12, 13, (JA 1690, 1691, 1692, 1693).

shows the scenario is not remote and speculative, then the County wins and the NRC must do an EIS. If the scenario turns out to be remote and speculative, as it did, then the County simply alludes vaguely to other scenarios that might turn out more likely and demands that everything be done over again. To prevent this kind of trial by exhaustion the County was obliged to choose a scenario it believed most likely to be significant, frame it as an admissible contention, litigate it before the Board, and abide by the result. This is in effect what the Licensing Board decided when it limited the County's EIS contention (EC-6) to the only scenario the County had identified with any specificity -- the seven-step scenario. That decision was reasonable and should be upheld.

II. The Licensing Board Reasonably Found The Seven-Step Accident Scenario "Remote and Speculative."

A. The Licensing Board's Factfinding Was Careful and Warrants Judicial Deference.

The federal courts do not sit as "courts of technical review" in reviewing challenges to agency scientific decisions. As the Supreme Court has often pointed out, when resolution of the underlying dispute involves "a high level of technical expertise, we must defer to the informed discretion of the responsible federal agencies." Marsh, 490 U.S. at 377, quoting Kleppe v. Sierra Club, 427 U.S. at 412. "Particularly when we consider a purely factual question within the area of competence of an administrative agency created by Congress, and when resolution of that question depends on 'engineering and scientific' considerations, we recognize the relevant agency's technical expertise and experience, and defer to its analysis unless it is without substantial basis in fact." FPC v. Florida Power & Light Co., 404 U.S. at 463.

Here, the NRC's Licensing Board reviewed voluminous and highly technical submissions. These submissions included a report and analysis from Dr. Thompson, the County's expert, as well as analyses and calculations from CP&L's experts, including a "PRA" (probabilistic risk assessment) affidavit that CP&L developed especially for this case, and a highly detailed technical analysis by four NRC Staff experts.[12] The Board also conducted a probing oral argument that covered over 250 pages of transcript, during which the Board heard

[12] The Court may wish to examine the NRC Staff's 125-page affidavit (JA 417) describing the extensive work the Staff experts performed to arrive at the probability figures presented to the Board. This was no "back of the envelope" analysis.

extensive presentations by all parties and asked numerous questions to resolve any matters in dispute on the various issues.

Following the oral argument, the Board, consisting of an attorney (who presided), a nuclear engineer, and a health physicist, reviewed the evidence and issued its decision. The Board's approach was methodical and meticulous:

> It carefully described and assessed the procedures performed and the assumptions made by all of the parties in answering the Board's questions about the probability of the seven-step accident sequence. The Board provided a step-by-step critique of the parties' efforts, noting areas of agreement and disagreement between them, and registering its conclusions about the propriety of the various assumptions made by the parties' technical witnesses. The Board's explanation of its approach was measured and persuasive.

CLI-01-11, 53 NRC at 387 (JA 9). At each step of the scenario, the Board summarized the events of that step and each party's probability determination, citing pleadings from which that summary was taken. See LBP-01-09, 53 NRC at 251-66 (JA 20-28). The Board then gave a careful and record-based explanation of exactly "why" it accepted a particular analysis. Id. Finally, based on its step-by-step approach, the Board issued a finding on the overall very low probability of the seven-step scenario, "two occurrences in 10 million reactor years." Id. at 266-67 (JA 20). The Board thus concluded that the proposed scenario was "remote and speculative." Id. at 267-69 (JA 20-21).

The Board cited ample record evidence for its findings at every step. Weighing the arguments differently, and using different numbers and assumptions, obviously Orange County and its expert, Dr. Thompson, disagree with the Board's findings. See Pet. Br. at 34-40. We submit that it is not this Court's function to decide which expert is right. "When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions

of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive." Marsh, 490 U.S. at 378.

Congress established the NRC to review controversies among experts, make the required calculations, and reach the necessary scientific conclusions. This Court should "defer to [the NRC's] analysis unless it is without a substantial basis in fact." FPC v. Florida Power & Light Co., 404 U.S. at 463. Here the Board's decision is thoroughly grounded in "a substantial basis in fact."

B. The Licensing Board Did Not Unlawfully Shift the Burden of Proof.

Perhaps recognizing the difficulty of overturning NRC technical findings, Orange County repeatedly casts its argument before this Court as a claim that the Licensing Board "unlawfully" shifted the burden of proof to the County during the hearing. See Pet. Br. at 32, et. seq. The Board did not do this. The Board stated explicitly (and correctly) that the Staff (and CP&L) had the burden to persuade the Board that the proposed accident was "remote and speculative" and did not trigger the need to prepare an EIS. See LBP-01-09, 53 NRC at 249 (JA 19). The Board terminated the hearing and rejected the County's contention only after it concluded that the Staff and CP&L had met their burden of persuasion and that introduction of evidence at a formal evidentiary hearing was not needed to resolve any essential disputes of fact.

With regard to the evidentiary hearing, it was the County's burden, as the Licensing Board pointed out, TR at 455 (JA 180), and as the County conceded, TR at 457, to show a "genuine and substantial dispute" between the parties that could only be resolved by

presenting evidence at a formal evidentiary hearing. See CLI-01-11, 53 NRC at 383-86 (JA 7-9); see generally 42 U.S.C. §10154(b); 10 C.F.R. §2.1115; 50 Fed. Reg. 41662, 41167 (Oct. 15, 1985). The County was required, in its written submissions or at the oral argument, to

show a need to move forward to further evidentiary proceedings.[13] It could not sit idly by and do nothing. The County simply failed to show that further proceedings would produce anything new and useful.

When the Licensing Board reviewed the parties' competing claims, it naturally weighed the respective arguments of the parties and discussed their comparative merits. When it found one argument more persuasive than another, the Board explained why, often pointing out that the County had not discussed a point at all or that its discussion was not as thorough or as technically proficient as submissions by the Staff or CP&L. Thus, in weighing the evidence, the Board considered either the County's lack of discussion or lack of persuasiveness. That is exactly what Boards are supposed to do. It is neither unusual nor an "unlawful" shift in the burden of proof. Taken in context, as we now show in greater detail, the County's claims are misplaced.

1. The NRC Did not Place an Unlawful Merits Burden on the County.

[13] On administrative appeal to the Commission, Orange County's prime argument was that disagreements among the parties' experts were enough to show genuine and substantial disputes of fact that could only be resolved with sufficient accuracy at a formal evidentiary hearing. The Commission rejected the County's argument as an oversimplification of Subpart K procedures, which go further than the Commission's pre-existing standards for summary disposition. See CLI-01-11, 53 NRC at 383-86 (JA 7-9). The County does not renew that argument on judicial review, understandably so in light of this Court's repeated approval of agencies' resolving technical disputes without resort to formal evidentiary hearings. See, e.g., Exxon Co., USA v. FERC, 182 F.3d at 46-47.

The County alleges that the Commission, in its appellate decision, "unlawfully imposed" the burden of preparing a comprehensive analysis of the probability of the seven-step scenario on the County "as a condition of obtaining a full evidentiary hearing." See Pet. Br. at 33. The language in the Commission decision to which the County objects is this:

> Even if a further evidentiary hearing were convened, Orange County apparently intends merely to reiterate its critique of the probabilistic risk assessment of others...but not to offer a fresh analysis of its own....Under these circumstances, scheduling a further hearing would only serve to delay these proceedings... in direct contravention of the NWPA.

CLI-01-11, 53 NRC at 389 (JA 10). It should be apparent that the Commission was not imposing any kind of merits burden on the County. The Commission was simply saying that there was no point in having an evidentiary hearing because the County had nothing new to offer that it had not already presented before. There was nothing unreasonable or unlawful about that. As the Commission noted, going ahead with an unnecessary and unproductive hearing is what would have been unlawful, a violation of the NWPA. The Commission, in other words, saw no likelihood that Orange County would contribute additional useful evidence at an evidentiary hearing. See generally id. at 386-89 (JA 7-10).

Moreover, the County argues that the Board impermissibly shifted the burden of proof in its analysis of Step Four of the seven-step scenario (extreme radiation levels precluding access) by comparing Dr. Thompson's analysis unfavorably with that of the NRC Staff and CP&L's experts. See Pet. Br. at 33-34. But what the Board did was simply to weigh -- and comment on -- the evidence presented to it. See LBP-01-09, 53 NRC at 258-60 (JA 24-25). The Board reviewed the County's evidence and found it lacking. The Board then took the evidence presented by the side which has the burden of persuasion, i.e., the Staff, found that it was credible, and looked to see if the County had presented any evidence that detracted from its credibility. It concluded that the

Staff had provided a credible explanation of its position, while the County's arguments were not sufficient to raise enough doubt to require a further hearing.[14]

2. The Board's Handling of the "Battle Of Experts" Did not Shift the Burden of Proof.

The County alleges that the Board improperly shifted the burden of proof by crediting the Staff's testimony while not recognizing that Dr. Thompson based his reviews on NRC Staff documents. See Pet. Br. at 34. The County cites five instances of this alleged defect. See Pet. Br. at 34-40. In essence, the County argues that Dr. Thompson's testimony was somehow immunized from attack or must be accepted without challenge because it relied, in part, on NRC Staff documents. But the Board's mere decision not to credit Dr. Thompson's testimony does not amount to an unlawful shifting of the burden of proof.

In their submissions to the Board, all three parties cited a significant number of the same generic documents, which is not unusual, in and of itself, given the limited number of documents published in discrete technical areas. Each party was required to interpret or evaluate the information in these generic reports to arrive at some conclusion about the implications of those reports for the Harris plant, given the current license amendment application. Dr. Thompson's Report does cite several studies performed either by or for the NRC, among other documents. So do the studies of both CP&L and the NRC Staff. It is clear that the parties

[14]The County argues that the Board "ignored" Dr. Thompson's testimony that "constraints of the proceeding and the limitations on available methodologies" did not permit a "comprehensive analysis by *any* party, including the NRC Staff." Pet. Br. at 34. Obviously, the Board rejected Dr. Thompson's testimony on this point as it did on others. The Board was not required to state that fact explicitly every time.

drew different conclusions from their sources, which included the NRC generic studies, else the parties would have agreed on the final probability numbers for the seven-step accident sequence. The fact that the Board credited the Staff's (or CP&L's) view of how prior studies relate to the Harris plant, and not Dr. Thompson's, does not mean that the Board shifted the burden of proof. It just means that the Board found that the Staff's analysis (and CP&L's) was persuasive and that Dr. Thompson's was not.

Quite simply, the County uses its "shift the burden of proof" argument in an effort to convert what is really a challenge to the Board's technical findings -- where deference to the

NRC is at its zenith -- into a challenge to the legality of the Board proceedings. At bottom, all that the County really disputes are the Board's decisions about which technical evidence and opinions to credit. But the Board was quite competent to look at the competing evaluations of the various studies and decide that question. The Board's decisions in this regard are fully reasonable and rooted in record evidence.

Two examples are sufficient to show this. The first is the County's claim that the Board improperly rejected Dr. Thompson's analysis of the probability of Event 2 in the seven-step sequence, a containment "bypass" or failure. See Pet. Br. at 35. Dr. Thompson relied on an NRC Staff document, NUREG-1570 (March 1998), and concluded that in the event of a degraded core accident (Step 1) there was a 50% conditional likelihood that Step 2 would occur. But while Dr. Thompson may not have "modified or qualified in any way" the NUREG's findings (Pet. Br. at 35), he certainly ignored the fact that the NUREG was based on procedures and plant configurations in place at the Surry plant in Southeastern Virginia, not at the Harris facility.

> [I]n order to accommodate the resource and schedule commitments for rulemaking, the staff largely focused this study on the Surry plant as a single representative example.

NUREG 1570 at 1-3 (JA 399).

In contrast, the Board noted that the Staff prepared an analysis that was based upon Harris-specific documents. See Affidavit of Gareth Parry, et al., filed Nov. 20, 2000, at 44-46 (JA 460-62). The Board thus reasonably criticized the County's submission as not "giving adequate consideration to the specific details of accident scenarios, containment and equipment configuration, and plant operating procedures that will effect the overall probability for containment failure or bypass." See LBP-02-09, 53 NRC at 255 (JA 22). In other words,

> the County's submission did not reflect the building configuration and plant operation procedures in place at the Harris site.

In sum, the County submitted a generalized conclusion that was based upon a generic study that reflected conditions and procedures at a different facility. The NRC Staff submitted a site-specific analysis that was based upon the procedures and building configuration in place at the Harris facility. It's an understatement to say that the Board made a reasonable decision to accept the site-specific analysis. In any event, Orange County's concern is of little moment, for the Board found that "regardless of [their] analytical differences, [the County] and the Staff do not differ significantly in their analyses of the postulated sequence through Step 2." See id. at 256 (JA 23).

The second example is the County's assertion that the Board erred in accepting the Staff's analysis of Step 4 (extreme radiation precluding access), in which the Staff used the ARCON96 computer code (called ARCON in the County's brief) to model

the atmospheric dispersion of the radioactive plume that would escape the containment in the County's proposed scenario. See Pet. Br. at 38. The County makes much of a statement in an NRC Staff document that the ARCON96 code is a "straight-line Gaussian model," which Dr. Thompson claims is inadequate to model the three-dimensional conditions posed by building wakes in the context of the postulated accident, i.e., how the shape of various buildings will affect the pattern of fallout from the accident. See Pet. Br. at 38-39, quoting NUREG/CR 6331, Rev. 1 (May, 1997) (JA 412).

The County's problem here is that Dr. Thompson failed to suggest to the Board any better way to model wake effects, which the County admits are "difficult to model." See Pet. Br. at 38 n.21. And ARCON96 does in fact take wake effects into account. The County

quotes from the first paragraph on Page 41 of NUREG/CR 6331, but omits the next paragraph, which informs the reader that building wake effects are included.

> ARCON96 permits evaluation of ground-level, vent, and elevated releases. Building wake effects are considered in the evaluation of relative concentrations from ground level releases.

NUREG/CR 6331 at 41 (JA 412). The next paragraph describes the three components for diffusion coefficients and notes that "two components are corrections to account for enhanced dispersion under low wind speed conditions and in building wakes." Id. And then the next paragraph expressly discusses the ARCON96 code's response to the building wake issue under different conditions, including low wind speed conditions, and notes that it is superior to prior approaches:

> The wake correction model included in ARCON96 treats diffusion under these conditions much better than previous models. Thus, the diffusion coefficients in ARCON96 account for both low-wind speed meander and wake effects.

Id. In short, the Board did not err when it accepted the Staff analysis that relied on ARCON96. See also CLI-01-11, 53 NRC at 388 n.9 (JA 10).

While we do not address in detail the County's three other claims of technical oversights by the Board -- i.e., that the Board erred in resolving the "transport mechanism, Pet. Br. at 36; Event 3, Pet. Br. at 37, and Event 6, Pet. Br. at 39-40 -- the same general analysis applies: both the NRC Staff and Dr. Thompson used the same documents as the starting point for their analyses. But the NRC Staff submitted analyses that were specifically calculated to address conditions at the Harris facility,[15] while -- in general -- Dr. Thompson submitted generalized conclusions drawn from generic studies. The Board was well within its discretion in crediting the Staff's analysis on each of these points.

C. The Licensing Board Reasonably Resolved Step 5 of the Accident Scenario.

Orange County raises special concerns over the Board's resolution of Step 5 (inability to restart cooling or makeup systems due to extreme radiation doses) in the seven-step sequence. See Pet. Br. at 40-42. They raise two challenges to the Board's handling of Step 5. However, neither can withstand close scrutiny.

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[15] See, e.g., Affidavit of Gareth Parry, et al., at 16 (¶34), 44-46 (¶¶97-101), 57 (¶108), 85 (¶167) (JA 432, 460-62, 473, 501).

First, the County argues that the Board "unlawfully assumed harm to the workers" in Step 5 of the scenario in order to reach its conclusion that the County's seven-step accident scenario was remote and speculative. See Pet. Br. at 40-42. What the County appears to mean by this argument is that when the Board relied on the NRC Staff's analysis showing that workers would restore spent fuel pool cooling or add makeup water despite radiation doses,[16] the Board should have recognized that this worker exposure was itself a significant impact that required preparation of an EIS.

But NEPA requires issuance of an EIS to discuss worker exposure impacts, like any other impacts, only if those impacts are reasonably foreseeable -- i.e., if they are not "remote and speculative." Thus, the County's argument must fail because the non-foreseeability of

these worker exposures is readily apparent from the record. The seven-step scenario presents no potential for harm to workers until the halfway point in the sequence, i.e., somewhere between event 3 and event 5, where both spent fuel pool cooling has been lost

[16]As we have described supra, the County's seven-step-scenario opens with (1) a major reactor accident followed by (2) a containment failure that leads to (3) a loss of spent fuel pool cooling. No one disputes there is ample time for workers to add makeup water and restore levels before a significant amount of water evaporates (on the order of several days), provided that workers have access to the pools. If for some reason, however, nothing is done to restore cooling or add water, part or all of the spent fuel pool water will eventually boil off and a serious radioactive release may occur. The key to the County's scenario is step (4), Dr. Thompson's conclusion that radiation doses from the reactor accident will preclude worker access. The County argues that this preclusion would (5) prevent restart of spent fuel pool cooling, leading to (6) a loss of spent fuel pool water and then (7) to an exothermic reaction (a fire) in the uncovered fuel. But contrary to Dr. Thompson's view, the NRC Staff found that even if the first three steps occurred –- a highly unlikely event in itself –- the resulting radiation fields at the pools would almost certainly not preclude access. Spent fuel pool cooling would be restored, or makeup water would be added, assuring that the accident, already extremely improbable (on the order of one in a million per reactor year), would not proceed to steps (6) and (7). See LBP-01-09, 53 NRC at 258-63 (JA 24-26) (citing NRC Staff evidence).

and radiation fields have developed strong enough to cause significant exposure to the response personnel who restore cooling or perform makeup functions. The table of cumulative probabilities in the Board's decision, see LBP-01-09, 53 NRC at 267 (JA 28) -- reproduced in Orange County's brief (at 24) -- shows quantitatively that even getting to this mid-stage of the County's scenario is highly improbable. Using the Staff's figures for the cumulative probabilities, which were reasonably accepted by the Board, one sees from the table that the probability that workers will incur significant exposure (in order to prevent a more serious accident) lies somewhere between 6.3E-06 and 2.0E-07 per reactor year, i.e. on the order of one in a million. Thus the Board's table provides a short but complete answer to the County's "harm to the workers" argument: this harm itself is not reasonably foreseeable. Its bare possibility is not nearly enough to require preparation of an EIS.[17]

Second, the County argues that the Board's decision was "arbitrary and capricious" because the Board relied on "non-existent calculations" in analyzing the probability of Step 5 in the seven-step scenario when it asserted that a CP&L evaluation supported the Board's findings. See Pet. Br. at 42-44. Briefly, the County alleges that CP&L did not submit for the record any calculations underlying its report and that the Board impermissibly based its conclusions on this "omitted" evidence. The problem with this claim is that the Board did not base its findings on CP&L's analysis.

[17] Notably, the Board and the Commission pointed out that the likely worker exposures would be within EPA guidelines for emergencies. See CLI-01-11, 53 NRC at 387 (JA 9).

Initially, at the outset of its opinion, the Board stated that it was resting its findings on the Staff's analysis of the probability of the accident, not on CP&L's analysis. See LBP-01-09, 53 NRC at 252 (JA 21). Turning to Step 5, the Board explicitly based its conclusion on the Staff's analysis of the probability that plant employees would be prevented from restoring spent fuel pool cooling water:

> The Staff's analysis in support of its probability estimate, which is supported by CP&L's detailed evaluation, appears reasonably thorough and credible based on existing regulations and guidance for exposure to emergency workers, as well as on the expected radiation fields in locations at which the SPF cooling recovery actions must take place and the availability of various alternative sources of cooling water.

Id. at 263 (JA 26). The Board's reference to CP&L in this paragraph ("which is supported by CP&L's analysis") is the only reference in the Board's analysis of Step 5 to the study that the County claims was not admitted into evidence. Even assuming arguendo that the CP&L study was not placed in the record of the case, the Board's single reference to it was simply corroborative of a Board finding resting on what it called the "thorough and credible" analysis of the NRC Staff. The reference to CP&L's evaluation hardly undermines the entire Board decision.

III. Orange County's Challenge To The NRC's "No Significant Hazards Consideration" Finding Is Meritless And In Any Event Unripe.

This Court need not reach the question whether the NRC Staff incorrectly found "no significant hazards consideration" ("NSHC") and issued the CP&L amendment before the hearing process ended unless, contrary to the views we expressed in Points I

and II, supra, the Court remands the case for further adjudication. Absent a judicial remand, the amendment is final and the NRC Staff's NSHC finding has no remaining significance. If the Court does reach the NSHC issue, it should affirm the Staff decision.

In 1983, Congress explicitly gave the NRC the right to make a reactor license amendment immediately effective, "notwithstanding the pendency before the Commission of a request for hearing from any person," upon making a NSHC finding. See 42 U.S.C. §2239(a)(2)(A). Congress enacted this provision nearly twenty years ago to override a decision by this Court[18] holding the Commission without power to issue immediately effective license amendments when an NRC hearing had been requested and remained pending. Thus, under current law, even when a party requests a hearing on a proposed amendment, the NRC may issue the amendment during the hearing if the NRC makes a NSHC finding. See 10 C.F.R. §50.92(c). The amendment is subject, of course, to the possibility that the hearing process may either modify or revoke the amendment.

In this case, Orange County does not challenge, as such, the Staff's analysis of the three NSHC factors set out in 10 C.F.R. §50.92(c). Instead, the County argues that: (1) the Staff did not respond to its comments opposing the proposed NSHC finding; (2) the finding was barred "as a matter of law" because of the Licensing Board's admission of the EIS contention (EC-6); and (3) the finding was barred because the case involves a NEPA issue. See Pet. Br. at 44-48. All three claims lack merit.

A. The NRC Staff Responded to the County's Comments.

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[18] See Sholly v. NRC, 651 F.2d 780 (D.C. Cir. 1980), vacated and remanded, 459 U.S. 1194 (1982), vacated and remanded to NRC, 706 F.2d 1229 (D.C. Cir. 1983). The legislation overriding the Sholly decision has become known as the "Sholly amendment."

Orange County alleges that it filed comments opposing the proposed NSHC finding and that "the Staff did not even mention Orange County's comments, let alone respond to them." See Pet. Br. at 45. On this basis "alone," the County says, this Court should reverse the Staff's NSHC finding. But the County's premise is entirely incorrect. The Staff both acknowledged the County's comments and responded to them in addressing the issues it resolved in making the NSHC finding.

As a matter of practice, the NRC Staff reviews and considers public comments on NSHC findings, see 64 Fed. Reg. at 2239 (JA 136), although no statute or NRC rule mandates direct responses to individual comments. See generally 10 C.F.R. §50.91(a). Here, the Staff explicitly acknowledged receipt of Orange County's petition to intervene, which included its comments, in the Federal Register Notice announcing the NSHC finding, see 65 Fed. Reg. 82405 (JA 32), and also in both the "Introduction" and "References" section of the Safety Evaluation Report ("SER") containing the Staff's technical analysis of the NSHC factors. See SER at 2, 44 (JA 45, 87). In fact, the SER references a number of the County's filings in the case. See SER at 44-46 (JA 86-88).

Moreover, while the SER does not address the County's comments by name, the SER does address many points raised by the County's comments, as a comparison of the County's comments and the SER shows. For example, on Page 4 of its comments (JA 1629), the County complains that the amendment will greatly increase the probability of a fuel handling accident as well as the probability of a criticality accident. The SER responds with extensive discussions of the possibility of a fuel handling accident and of the risk of a criticality accident. See SER at 4-7, 14-19 (JA 47-50, 57-62); see also SER at 37-38 (JA 79-80). Similarly, on page 7 of its comments (JA 1632), the County alleges that the amendment "will create an additional heat load on the CCW system," but again the SER responds to the County's point. See SER at 39-40 (JA 81-82). The same is true of the bulk of the County's other

comments. Compare, e.g., Comments at 7 (JA 1632) with SER at 33-35 (JA 76-78) (piping). And, at the Commission's request, the NRC Staff ultimately filed a brief (JA 150) addressing a number of additional NSHC issues, including ones of concern to the County. See CLI-01-07, 53 NRC at 118-19 (JA 121).

It can hardly be said, in short, that the NRC Staff ignored the County's concerns. No rule of law requires an agency to answer all comments point-by-point. See Reytblatt v. NRC, 105 F.3d 715, 722-23 (D.C. Cir. 1997). The County's brief in this Court does not even identify which comments the NRC overlooked or explain why they may have been significant. The brief provides no basis for reversal of the Staff's immediate effectiveness decision.

B. Admission of the EIS Contention (EC-6) Did not Preclude a "No Significant Hazards Consideration" Finding.

In its brief, the County argues that "[b]y admitting the [EIS] contention in LBP-00-19, the [Licensing Board] established as a matter of law, the potential for a credible accident scenario, never before considered by the NRC . . .." Pet. Br. at 45. In effect, the County argues that because the Board admitted Contention EC-6, the Board conclusively established the possibility of a "new and different kind of accident" -- one of the NSHC inquiries in 10 C.F.R. §50.92(c) -- and that this barred NRC from making a NSHC finding until the conclusion of the hearing.

But that cannot be correct. If it were, Congress's intent in passing the "Sholly amendment" would be eviscerated, for "as a matter of law" every time the Commission granted a hearing request, and admitted an environmental or safety contention, an amendment's effectiveness would have to await the outcome of the hearing -- the exact opposite of what the Sholly amendment intended. The validity of a NSHC determination depends on the NRC

Staff's technical findings and on the reasoning in support of its findings, not on separate decisions by licensing boards on the sufficiency of pleadings. Here, in an extensive Safety Evaluation Report (JA 44-89), the NRC Staff made the technical findings specified in 10 C.F.R.

§50.92(c) -- findings that Orange County's NSHC argument neither mentions nor challenges. See Pet. Br. at 45.

The County cites San Luis Obispo Mothers for Peace v. NRC, 799 F.2d 1268 (9th Cir. 1986), where a split Ninth Circuit panel set aside an NRC Staff NSHC finding. But that case is easily distinguishable. There, the Commission conceded that the change in spent fuel pool at the Diablo Canyon facility created the possibility of a specific new accident, i.e., in the event of an earthquake, the new style racks could slide into each other or the walls of the pool, creating the risk of a spent fuel pool fire. See id. at 1270. It was not a "beyond-design-basis" accident. Here, by contrast, the County's EIS contention (EC-6) -- whose admission into the hearing the County claims precluded the Staff's immediate effectiveness determination -- posits an accident that starts with an unknown and undefined "degraded core accident," which is a "beyond design basis" accident. It does not resemble the specific and concrete accident at issue in the Diablo Canyon case.

C. The "No Significant Hazards Consideration" Finding Did Not Violate NEPA.

Orange County alleges that "[i]t was patently illegal" for the NRC Staff to make the NSHC finding and issue the amendment before the determination whether an EIS was required had been made because "environmental consequences of a proposed federal action must be considered before it goes forward." Pet. Br. at 46 (emphasis in original). But the Staff had in fact already (a year

earlier) issued its Environmental Assessment determining that an EIS was not required (JA 122-24). That determination was of course subject to review by the Licensing Board at a hearing, but making the license amendment effective in the meantime was entirely in accord with the Sholly provision. Congress did not carve out an exception for NEPA-related license amendments in the Sholly legislation, which applies to "any" amendment.

D. The "No Significant Hazards Consideration" Finding Is not Ripe for Judicial Review.

We originally moved to dismiss Orange County's NSHC claims as unripe. See p. 4, supra. A motions panel of this Court referred the ripeness issue to the merits panel. It remains true, in our view, that the County challenged the NSHC finding prematurely, because at the time of the County's suit the Commission had solicited further information from the NRC staff and had indicated an intent to consider whether to review the NSHC questions itself. See CLI-01-07, 53 NRC at 118-19 (JA 121). This Court ordinarily does not review initial decisions still under consideration before a federal agency. See DRG Funding Corp. v. HUD, 76 F.3d 1212, 1215 (D.C. Cir. 1996). Where, as here, an agency has not stated its final views, and no clear hardship would result from withholding court review, a lawsuit is unripe. See New York State Elec. & Gas Corp. v. FERC, 177 F.3d 1037, 1040 (D.C. Cir. 1999).

That said, for the reasons given above, Orange County's only arguments against the NRC Staff's NSHC finding are patently defective. Hence, in the unlikely event that this Court even reaches the NSHC issue, it can simply affirm the Staff decision, and

leave it to the Commission to complete its consideration of the NSHC questions that the Commission itself raised originally. In the alternative, this Court could dismiss the County's NSHC suit (No. 01-1073) as unripe.

## CONCLUSION

For the foregoing reasons, this Court should deny the petitions for review.

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Dated: June 17, 2002

UNITED STATES COURT OF APPEALS

FOR THE DISTRICT OF COLUMBIA CIRCUIT

| | |
|---|---|
| ORANGE COUNTY, NORTH CAROLINA,<br>Petitioner,<br><br>v.<br><br>U.S. NUCLEAR REGULATORY COMMISSION<br>and the UNITED STATES OF AMERICA,<br>Respondents, and<br><br>CAROLINA POWER & LIGHT COMPANY,<br>Intervenor-Respondent. | )<br>)<br>)<br>) Nos. 01-1073 and 01-1246 (Consolidated)<br>)<br>)<br>)<br>)<br>)<br>)<br>) |

CERTIFICATE REGARDING WORD COUNT UNDER FRAP 32(A)(7)(C).

I hereby certify that the number of words in the Initial Brief for the Federal Respondents, excluding Table of Contents, Table of Authorities, Glossary, Addendum, and Certificates of Counsel, is 13,956, as counted by the Corel WORDPERFECT program.

Respectfully submitted,

_____

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June 17, 2002.

STATUTORY AND REGULATORY ADDENDUM

Pertinent Statutes and Regulations

STATUTES:


1. Section 189a of the Atomic Energy Act, 42 U.S.C. §2239(a)(1)(A) and (A)(2)(A). ADD 1

2. Section 134 of the Nuclear Waste Policy Act, 42 U.S.C. §10154(a) and (b). ADD 2


REGULATIONS:


1. 10 C.F.R. §2.714(b) ADD 4

2 10 C.F.R §50.58 ADD 5

3. 10. C.F.R §50.92 ADD 6.

**Sec. 189. Hearings and Judicial Review.**

42 USC 2239. Hearings and judicial review.

a. (1)(A) In any proceeding under this Act, for the granting, suspending, revoking, or amending of any license or construction permit, or application to transfer control, and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licensees, and in any proceeding for the payment of compensation, an award, or royalties under sections **153, 157, 186c., or 188, the** Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding. The Commission shall hold a hearing after thirty days' notice and publication once in the Federal Register, on each application under section 103 or 104b. for a construction permit for a facility, and on any application under section 104c. for a construction permit for a testing facility. In cases where such a construction permit has been issued following the holding of such a hearing, the Commission may, in the absence of a request therefor by any person whose interest may be affected, issue an operating license or an amendment to a construction permit or an amendment to an operating license without a hewing, but upon thirty days' notice and publication once in the Federal Register of its intent to do so. The Commission may dispense with such thirty days' notice and publication with respect to any application for an amendment to a construction permit or an amendment to an operating license upon a determination by the Commission that the amendment involves no significant hazards consideration.119

Federal Register. Publication

(B)(i) Not less than 180 days before the date schedules for initial loading of fuel into a plant by a licensee that has been issued a combined construction permit and operating license under section 185b., the Commission shall publish in the Federal Register notice of intended operation. That notice shall provide that any person whose interest may be affected by operation of the plant, may within 60 days request the Commission to hold a hearing on whether the facility as constructed complies, or on completion will comply, with the acceptance criteria of the license.

(ii) A request for hearing under clause (i) shall show, prima facie, that one or more of the acceptance criteria in the combined license have not been, or will not be met, and the specific operational consequences of nonconformance that would be contrary to providing reasonable assurance of adequate protection of the public health and safety.

(iii) After receiving a request for a hearing under clause (i), the Commission expeditiously shall either deny or grant the request. If the request is granted, the Commission shall determine, after considering petitioners' prima facie showing and any answers thereto, whether during a period of interim operation, there will be reasonable assurance of adequate protection of the public health and safety. If the Commission determines that there is such reasonable assurance, it shall allow operation during an interim period under the combined license.

(iv) The Commission, in its discretion, shall determine appropriate hearing procedures, whether informal or formal

adjudicatory, for any hearing under clause (i), and shall state its reasons therefor.

(v) The Commission shall, to the maximum possible extent, render a decision on issues raised by the hearing request within 180 days of the publication of the notice provided by clause (i) or the anticipated date for initial loading of fuel into the reactor, whichever is later. Commencement of operation under a combined license is not subject to subparagraph (A).230

(2)(A) The Commission may issue and make immediately effective any amendment to an operating license or any amendment to a combined construction and operating license, upon a determination by the Commission that such amendment involves no significant hazards consideration, notwithstanding the pendency before the Commission of a request for a hearing from any person. Such amendment may be issued and made immediately effective in advance of the holding and completion of any required hearing. In determining under this section whether such amendment involves no significant hazards consideration, the Commission shall consult with the State in which the facility involved is located. In all other respects such amendment shall meet the requirements of this Act.

**Sec. 134. LICENSING OF FACILITY EXPANSIONS AND TRANSSHIPMENTS**

42 USC 10 154.

(a) Oral Argument-In any Commission hearing under section 189 of the Atomic Energy Act of 1954 (42 USC 2239) on an application for a license, or for an amendment to an existing license, filed after the date of the enactment of this Act, to expand the spent nuclear fuel storage capacity at the site of a civilian nuclear power reactor, through the use of high-density fuel storage racks, fuel rod compaction, the transshipment of spent nuclear fuel to another civilian nuclear power reactor within the same utility system, the construction of additional spent nuclear fuel pool capacity or dry storage capacity, or by other means, the Commission shall, at the request of any party, provide an opportunity for oral argument with respect to any matter which the Commission determines to be in controversy among the parties. The oral arguments shall preceded by such discovery procedures as the rules of the Commission shall provide. The Commission shall require each party, including the Commission staff, to submit in written form, at the time of the oral argument, a summary of the facts, data, and arguments upon which such party proposes to rely that are known at such time to such party. Only facts and data in the form of sworn testimony or written submission may be relied upon by the parties during oral arguments. Of the material that may be submitted by the parties during oral arguments, the Commission shall only consider those facts and data that are submitted in the form of sworn testimony or written submission.

Summary sub mittal of facts data and arguments

(b) Adjudicatory Hearing.-(I) At the conclusion of any oral argument under subsection (a), the Commission shall designate any disputed questions of fact, together with any remaining questions of law, for resolution in an adjudicatory hearing only if it determines that

(A) there is a genuine and substantial dispute of fact which can only be resolved with sufficient accuracy by the introduction of evidence in an adjudicatory hearing; and

(B) the decision of the Commission is likely to depend in whole or in part on the resolution of such dispute.

(2) In making a determination under this subsection, the Commission

(A) shall designate in writing the specific facts that are in genuine and substantial dispute, the reason why the decision of the agency is likely to depend on the resolution of such facts, and the reason why an adjudicatory hearing is likely to resolve the dispute; and

(B) shall not consider

(i) any issue relating to the design, construction, or operation of any civilian nuclear power reactor already licensed to operate at such site, or any civilian nuclear power reactor for which a construction permit has been granted at such site, unless the Commission determines that any such issue substantially affects the design, construction, or operation of the facility or- activity for which such license application, authorization, or amendment is being considered; or

(ii) any siting or design issue fully considered and decided by the Commission in connection with the issuance of a

construction permit or operating license for a civilian nuclear power reactor at such site, unless (1) such issue results from

any revision of siting or design criteria by the Commission following such decision; and (11) the Commission determines that such issue substantially affects the design, construction, or operation of the facility or activity for which such license application, authorization, or amendment is being considered.

(3) 7be provisions of paragraph (2)(B) shall apply only with respect to licenses, authorizations, or amendments to licenses or authorizations, applied for under the Atomic Energy Act of 1954 (42 USC 2011 et seq.) before December 31, 2005.

(4) The provisions of this section shall not apply to the first application for a license or license amendment received by the -Commission to expand onsite spent fuel storage capacity by the use of a new technology not previously approved for use at any nuclear power plant by the Commission. (c) Judicial Review.-No court shall hold unlawful or set aside a decision of the Commission in any proceeding described in subsection (a) because of a failure by the Commission to use a particular procedure pursuant to this section unless-

(1) an objection to the procedure used was presented to the Commission in a timely fashion or there are extraordinary circumstances that excuse the failure to present a timely objection; and

(2) the court finds that such failure has precluded a fair consideration and informed resolution of a significant issue of the proceeding taken as a whole.- --- - -- - -

ADD 4

**12.714 ]Intervention-**

(b)(1) Not later than fifteen (15) days Prior to the holding of the special pre-hearing conference pursuant to 12.751a, or if no special pre-hearing conference Is held, fifteen (15) days prior to the holding of the first pre-hearing conference, the petitioner shall file a supplement to his or her petition to intervene that must Include a list of the contentions which petitioner seeks to have litigated in the hearing. A petitioner who fails to Ale a supplement that satisfies the requirements of paragraph (b)(2) of this section with respect to at least one contention will not be permitted to participate as a party. Additional time for filing the supplement may be granted based upon a balancing of the factors in paragraph (a)(1) of this section.

(2) Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide the following information with respect to each contention:

(I) A brief explanation of the bases of the contention.

01) A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely In proving the contention at the hearing, together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner Intends to rely to establish those facts or expert opinion.

(III) Sufficient information (which may include information pursuant to paragraphs (b)(2) (I) and 01) of this section) to show that a genuine dispute exists with the applicant on a material issue of law or fact. This showing must include references to the specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report. The petitioner can amend those contentions or Ale new contentions. If there are data or conclusions In the NRC draft or final environmental Impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's document.

ADD 5

**150.58 Hearings and report of the Advisory Committee on Reactor Safeguards**.

(a) Each application for a construction permit or an operating license for a facility which is of a type described in § 50.21(b) Or § 50.22, or for a testing facility, shall be referred to the Advisory Committee on Reactor Safeguards for a review and report. An application for an amendment to such a construction permit or operating license may be referred to the Advisory Committee on Reactor Safeguards for review and report. Any report shall be made part of the record of the application and available to the public, except to the extent that security classification prevents disclosure.

(b)(1) The Commission will hold a hearing after at least 30-days' notice and publication once in the FEDERAL REGISTER on each application for a construction permit for a production or utilization facility which is of a type described in §50.21(b) or 150.22, or for a testing facility.

(2) When a construction permit has been issued for such a facility following the holding of a public hearing, and an application is made for an operating license or for an amendment to a construction permit or operating license, the Commission may hold a hearing after at least 30-days' notice and publication once in the FEDERAL REGISTER, or, in the absence of a request therefor by any person whose interest may be affected, may issue an operating license or an amendment to a construction permit or operating license without a hearing, upon 30-days' notice and publication once in the FEDERAL REGISTER of its intent to do so.

(3) If the Commission finds, in an emergency situation, as defined in §50.91, that no significant hazards consideration is presented by an application for an amendment to an operating license, it may dispense with public notice and comment and may issue the amendment. If the Commission finds that exigent circumstances exist, as described in §50.91, it may reduce the period provided for public notice and comment.

(4) Both in an emergency situation and in the case of exigent circumstances, the Commission will provide 30 days notice of opportunity for a hearing, though this notice may be published after issuance of the amendment If the Commission determines that no significant hazard consideration is involved.

(5) The Commission will use the standards in §50.92 to determine whether a significant hazards consideration is presented by an amendment to an operating license for a facility of the type described In §50.21(b) or §50.22, or which is a testing facility, and may make the amendment immediately effective, notwithstanding the pendency before it of a request for a hearing from any Person, in advance of the holding and completion of any required hearing, where it has determined that no significant hazards consideration is Involved.

(6) No petition or other request for review Of or hearing on the staff's significant hazards consideration determination will be entertained by the Commission. The staff’s determination is final, subject only to the Commission's discretion, on its own initiative, to review the determination.

(27 FR 12186, Dec. 8, 1962, as amended at 35 FR 11461, July 17, 1970: 39 FR 10&55, Mar. 21. 1974; 51 FR 7765. Mar. 6, 1986]

I

ADD 6

**150.92 Issuance of amendment.**

(a) In determining whether an amendment to a license or construction permit will be issued to the applicant, the Commission will be guided by the considerations which govern the issuance of initial licenses or construction permits to the extent applicable and appropriate. U the application Involves the material alteration of a licensed facility, a construction permit will be issued before the Issuance of the amendment to the license. If the amendment involves a significant hazards consideration, the Commission will give notice of its proposed action (1) pursuant to §2.105 of this chapter before acting thereon and (2) as soon as practicable after the application has been docketed.

(b) The Commission will be particularly sensitive to a license amendment request that involves irreversible consequences (such as one that permits a significant increase in the amount of effluents or radiation emitted by a nuclear power plant).

(c) The Commission may make a final determination, pursuant to the procedures in J50.91, that a proposed amendment to an operating license for a facility licensed under 150.21(b) or §50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or

(2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) Involve a significant reduction in a margin of safety.

[51 FR 7767. Mar. 6, 19861

UNITED STATES COURT OF APPEALS
DISTRICT OF COLUMBIA CIRCUIT

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|---|---|---|
| ORANGE COUNTY, NORTH CAROLINA<br>Petitioner, | ) | No. 01-1073 & 01-1246<br>(Consolidated) |
| U.S. NUCLEAR REGULATORY COMMISSION and the UNITED STATES OF AMERICA,<br>Respondents, and | ) | |
| CAROLINA LIGHT & POWER COMPANY,<br>Intervener-Respondent | ) | |

I hereby certify that the BRIEF FOR THE FEDERAL RESPONDENTS was served by placing copies in the United States Mail, postage prepaid, addressed to:

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