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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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ATOMIC SAFETY AND LICENSING BOARD

SERVED 08/07/00

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman
Frederick J. Shon
Dr. Peter S. Lam

In the Matter of	Docket No. 50-400-LA
CAROLINA POWER & LIGHT COMPANY	ASLBP No. 99-762-02-LA
(Shearon Harris Nuclear Power Plant)	August 7, 2000

MEMORANDUM AND ORDER
(Ruling on Late-Filed Environmental Contentions)

Pending before the Licensing Board is the motion of intervenor Board of Commissioners of Orange County, North Carolina, (BCOC) seeking admission of four late-filed contentions. Each of these issue statements concerns the purported need for the NRC staff to prepare an environmental impact statement (EIS) regarding the pending request of applicant Carolina Power & Light Company (CP&L) for an amendment to its operating license for its Shearon Harris Nuclear Power Plant (Harris) to permit the addition of rack modules to spent fuel pools (SFPs) C and D and to place those pools in service. Although both CP&L and the staff declare that a balancing of the five late-filing elements of 10 C.F.R. § 2.714(a) weighs in favor of admitting the contentions, they nonetheless assert that the contentions should be rejected as lacking adequate basis and specificity as required by section 2.714(b), (d).

For the reasons set forth below, we find that (1) the section 2.714(a) balancing process supports admission of the contentions notwithstanding their "lateness"; and (2) one of the environmental contentions, which we redesignate as Environmental Contention (EC)-6, should

be admitted, subject to the limitations described herein. Additionally, we establish a schedule for the further litigation of contention EC-6.

I. BACKGROUND

The question of the admission for litigation of the general subject matter of the four late-filed contentions now before the Board first arose in the context of BCOC's initial, timely-filed contentions. In its April 5, 1999 supplement to its February 1999 hearing petition, BCOC proffered five issue statements, which were designated EC-1 through EC-5, challenging CP&L and staff compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA) relative to the applicant's SFP expansion amendment. Among other things, those contentions asserted that the proposed license amendment was not exempt from NEPA's requirements under 10 C.F.R. § 51.22; that an EIS was required that addressed amendment effects on Harris accident probability and consequences and alternative costs and benefits, including severe accident mitigation design alternatives (SAMDAs) and dry cask storage; that the EIS needed to address storage of spent fuel from CP&L's Brunswick and Robinson plants; that an environmental assessment must be conducted; and that a discretionary EIS is required under 10 C.F.R. §§ 51.20(b)(14), 51.22(b). As we described in our July 1999 memorandum and order ruling on the admissibility of those five contentions, as a result of a superseding staff determination to prepare an environmental assessment (EA) relating to the proposed CP&L license amendment, we concluded BCOC's concerns were premature and dismissed those contentions, albeit without prejudice to their being raised at a later juncture, as appropriate. See LBP-99-25, 50 NRC 25, 38-39 (1999).

In that same issuance, we admitted two of BCOC's technical contentions that thereafter were subject to litigation in accordance with the provisions of 10 C.F.R. Part 2, Subpart K. While the parties were preparing for 10 C.F.R. § 2.1113 oral presentations to the Board on the

issue of whether there were disputed material facts that warranted further exploration in an evidentiary hearing relative to the admitted BCOC technical contentions, the staff provided the Board and the other parties with a Board Notification indicating that on December 15, 1999, it had issued an EA regarding the CP&L amendment request. See Letter from Richard J. Laufer, Project Manager, NRC Office of Nuclear Reactor Regulation to Licensing Board and Parties (Jan. 10, 2000). In its EA, which was published in the Federal Register on December 21, 1999, the staff concluded that an EIS was unnecessary relative to the CP&L spent fuel pool expansion request because it did not involve a proposed action that would have a significant effect on the quality of the human environment. See 64 Fed. Reg. 71,514, 71,516 (1999).

Relative to this EA, on January 31, 2000, BCOC filed the request for admission of four late-filed NEPA-related contentions that is now pending with the Board. In these contentions, which are numbered EC-1 through EC-4, BCOC challenges the staff's EA, asserting that (1) an EIS must be prepared because the proposed Harris SFP expansion would create accident risks substantially in excess of those the staff identified in the EA or previously evaluated in the Harris operating license EIS that would significantly affect the quality of the human environment; (2) the EIS that must be prepared must evaluate the significant cumulative environmental risk posed by the operation of pools A, B, C, and D that was not acknowledged in the EA; (3) the EIS that must be prepared must include within its scope an analysis of the impacts of storage of spent fuel from the Brunswick and Robinson nuclear power plants; and (4) a discretionary EIS is needed. BCOC further asserts that a balancing of the five late-filing elements of 10 C.F.R. § 2.714(a)(1) supports a finding that the timing of its filing should not be a bar to their admission. Additionally, BCOC provides information regarding the grounds for each contention that it declares is sufficient to provide the requisite specificity and basis in accordance with the substantive contention admission standards in section 2.714(b), (d). See

[BCOC] Request for Admission of Late-Filed Environmental Contentions (Jan. 31, 2000) at 23-27 [hereinafter BCOC Contentions Request].

On March 3, 2000, CP&L and the staff filed responses to the BCOC late-filed request. Both assert that section 2.714(a) late-filing factors three and five -- developing a sound record and broadening or delaying the proceeding -- do not support late-filed admission. In particular, both suggest relative to factor three that BCOC supporting affiant Dr. Gordon Thompson lacks the requisite education, qualifications, and experience to assist the Board in developing a sound record. Neither, however, contests that BCOC has established that the paramount "good cause" factor, along with factors two and four -- availability of other means or parties to protect BCOC's interests -- all weigh in favor of admitting the contentions, thereby tipping the overall balance in favor of a finding that late-filing does not bar admission of the contentions. See [CP&L] Response to BCOC's Late-Filed Environmental Contentions (Mar. 3, 2000) at 1-2 [hereinafter CP&L Contentions Response]; NRC Staff Response to [BCOC] Request for Admission of Late-Filed Environmental Contentions (Mar. 3, 2000) at 1-4 [hereinafter Staff Contentions Response].

What CP&L and the staff do dispute is BCOC's claim that the contentions fulfill the pleading requirements of section 2.714, asserting for various reasons that each of the contentions lacks the requisite specificity and basis. See CP&L Contention Response at 7-29; Staff Contention Response at 7-29. In a March 13, 2000 reply to the CP&L and staff responses, BCOC challenges their claims regarding the adequacy of Dr. Thompson's qualifications relative to late-filing factor three as well as their assertions concerning the adequacy of the four contentions. See [BCOC] Reply to [CP&L's] and Staff's Oppositions to Request for Admission of Late-Filed Environmental Contentions (Mar. 13, 2000) at 1-22 [hereinafter BCOC Contentions Reply].

Subsequently, it came to the Board's attention that there was outstanding on the public record a recent draft staff technical study concerning spent fuel pool accident risks, see 65 Fed. Reg. 8752 (2000) (soliciting public comment on draft report), which was one of the matters that was of concern to BCOC in the context of its contention denominated as EC-1, Environmental Impact Statement Required. Although recognizing that this staff report dealt with spent fuel pool accident risks associated with facility decommissioning activities, the Board provided the parties with an opportunity to provide their views, and respond to the views of the other parties, on the relevance, if any, of this study to the issues before the Board. See Memorandum and Order (Requesting Additional Information) (Mar. 21, 2000) at 1-2 (unpublished). Thereafter, all three of the parties filed comments regarding the draft staff report. BCOC asserted that although the study's limited scope -- i.e., decommissioning -- restricted its relevance, the staff's technical analysis still was pertinent in that it (1) further illustrates how the staff has underestimated the risks of SFP accidents because that study does not include an assessment of the phenomena associated with partial exposure of fuel assemblies, a subject that is at the center of Dr. Thompson's concerns about the SFP accident risks; (2) fails to consider the effect of fuel age on potential for propagation of exothermic reactions; (3) does not discuss criticality accident risk from the placement of low-burnup fuel in a pool in which there is reliance on burnup credit to prevent criticality; and (4) lacks sufficient information regarding zirconium fire propagation. See [BCOC] Response to Board's Information Request (Mar. 29, 2000) at 2-10; see also [BCOC] Reply to [CP&L's] and Staff's Responses to Board's Information Request (Apr. 5, 2000) at 2-7. Both CP&L and the staff, on the other hand, found the draft report basically irrelevant to the admission of the contention because it concerns a decommissioned reactor rather than an operating reactor like Harris, although each found points in the draft report, such as the availability and timing of pool water makeup, that supported its position that BCOC contention EC-1 was not admissible. See [CP&L] Response to Board's Request

Regarding Relevance of Staff's Draft Final Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Plants (Mar. 29, 2000) at 2-6; NRC Staff Response to the Atomic Safety and Licensing Board's Request for Additional Information (Mar. 29, 2000) at 2-5; see also CP&L Reply to Parties' Responses Regarding Relevance of Staff's Draft Decommissioning Study (Apr. 5, 2000) at 2-3; NRC Staff's Reply to [BCOC] Response to the Board's Request for Additional Information (Apr. 5, 2000) at 2-5.

Thereafter, by order dated May 5, 2000, the Board again requested information from the parties in connection with the draft staff report, prompted by an April 13, 2000 public record letter from Advisory Committee on Reactor Safeguards (ACRS) Chairman Dana A. Powers to NRC Chairman Richard A. Meserve providing ACRS views on the draft staff report, including concerns about the potential for exothermic reactions in the event a pool is drained and the resulting release of rutherium, as a source term element. See Licensing Board Memorandum and Order (Requesting Additional Information) (May 5, 2000) at 1-2 (unpublished). In its May 15, 2000 response, BCOC found this letter reinforced its contention EC-1 claim that spent fuel pool accident risks are greater than the staff assumes because the staff does not understand the potential for SFP exothermic reactions. See [BCOC] Response to May 5, 2000, Memorandum and Order (Requesting Additional Information) (May 15, 2000) at 1-4. In their May 15 responses, CP&L and the staff maintained that, like the staff draft report, the ACRS letter is irrelevant because it deals with a decommissioned facility, not an operating reactor like Harris. See [CP&L] Response to Board's Request Regarding Relevance of ACRS Letter Addressing NRC Staff Draft Decommissioning Study (May 15, 2000) at 1-3; NRC Staff Response to the Atomic Safety and Licensing Board's Second Request for Additional Information (May 15, 2000) at 2-3; see also [CP&L] Reply to Parties' Responses Regarding Relevance of ACRS Letter Addressing NRC Staff Draft Decommissioning Report (May 22,

2000) at 2-5; NRC Staff Reply to [BCOC] Response to May 5, 2000, Memorandum and Order (Requesting Additional Information) (May 22, 2000) at 1-2.

Finally, in response to a July 12, 2000 BCOC motion, on July 13, 2000, the Board granted leave for the parties to comment on a June 20, 2000 letter from ACRS Chairman Powers to NRC Chairman Meserve concerning the proposed resolution of outstanding Generic Safety Issue (GSI)-173A, regarding an action plan for resolving issues relating to operating reactor SFPs. See Licensing Board Memorandum and Order (Granting Motion for Leave to Comment) (July 13, 2000) at 1-2 (unpublished). BCOC took the position that, as with the ACRS comments on the staff decommissioning study, this letter was relevant to its accident risk contention, particularly as it concerns SFP radiological inventories and release characteristics. See [BCOC] Comments on Relevance of June 20, 2000, ACRS Letter with Respect to Pending Environmental Contentions (July 20, 2000) at 3-4. In their comments on the ACRS letter, both CP&L and the staff asserted that this ACRS letter had no relevance to the BCOC contentions because, as with the previous ACRS letter, it does not concern that specific beyond-design-basis reactor accident scenario that is the underpinning for the BCOC accident risk contention. See [CP&L] Comments on Relevance of June ACRS Letter to Pending Environmental Contentions (July 20, 2000) at 3-8; NRC Staff Comments on [ACRS] Letter of June 20, 2000 (July 20, 2000) at 2-3; see also [CP&L] Reply to Parties' Comments on Relevance of June ACRS Letter to Pending Environmental Contentions (July 27, 2000) at 2-4.

II. ANALYSIS

All the parties recognize that the five late-filing factors set forth in 10 C.F.R. § 2.714(a)(1) are applicable to BCOC's four pending environmental contentions. And, relative to such late-filed contentions, it is well-established that the burden rests with the petitioner, here BCOC, to address affirmatively all five factors and demonstrate that, on balance, they warrant

excusing the lateness of the filing. Moreover, even if a late-filed contention fulfills the section 2.714(a)(1) requirements, it must still satisfy the admissibility standards set forth in section 2.714(b)(2)(i)-(iii), (d)(2), in order to receive merits consideration. See, e.g., Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-99-43, 50 NRC 306, 312 (1999) (citing cases), petition for interlocutory review denied, CLI-00-2, 51 NRC 77 (2000).

A. Application of 10 C.F.R. § 2.714(a)(1) Late-Filing Criteria

It is, of course, also well-established that the first factor -- whether there is "good cause" for the failure to file on time -- is the most important component in the late-filed balancing equation. The BCOC environmental contentions now at issue were not filed until some nine months after contentions were due in this proceeding. Nonetheless, section 2.714(b)(2)(iii) recognizes that a petitioner can file amended or new contentions "if there are data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements related thereto, that differ significantly from the data or conclusions in the applicant's [environmental report]." Here, the crux of BCOC's concerns, as expressed in its January 2000 contentions, is that the staff erred in its December 1999 EA in concluding that no EIS is needed. As both CP&L and the staff acknowledge, there is good cause for such a "late-filed" challenge, assuming the contentions involved are filed within a reasonable time after BCOC became, or should have become, aware of the staff EA.

In this instance, BCOC's late-filed contentions pleading was submitted some forty-five days after the EA was first provided to BCOC counsel by fax from the staff. BCOC declares that this period for filing was reasonable given that BCOC counsel (1) until January 4, 2000, was involved in preparing its 10 C.F.R. § 2.1113 written presentation regarding the two admitted technical contentions; (2) between January 8 and January 17, was on previously scheduled, ten-day overseas non-vacation trip; (3) between January 17 and January 21, was involved in preparing for and participating in the oral argument regarding that filing, which was

held during an all-day session on January 21, 2000; and (4) between January 24 and January 31, was working on two other cases, and was out of her Washington, D.C. office on one day and was unable to reach her client on two days because of inclement weather. See BCOC Contentions Request at 23-25. Neither CP&L nor the staff dispute that, under the circumstances, the "good cause" element of the section 2.714(a)(1) test has been fulfilled such that this factor favors admitting the contentions. We agree, and thus place this central factor on the "acceptance" side of the balance.

Relative to the other four factors, we also agree with the parties that factors two and four -- availability of other means to protect petitioner's interests and extent of representation of petitioner's interests by other parties -- weigh in BCOC's favor. As to factors three and five, which among the four non-good cause elements are given more weight in the balancing process, see Commonwealth Edison Co. (Braidwood Nuclear Power Station, Units 1 and 2), CLI-86-8, 23 NRC 241, 244-45 (1986), both are problematic in terms of their impact on the balance. Given our May 2000 ruling in favor of CP&L on the two technical issues we admitted for merits consideration, see LBP-00-12, 51 NRC 247, petition for review denied as interlocutory, CLI-00-11, 51 NRC __ (June 20, 2000), the admission of any of these environmental contentions undoubtedly will broaden the issues and delay the proceeding. Moreover, relative to element three -- assistance in developing a sound record -- our observation in our May 2000 decision that Dr. Thompson's expertise on reactor technical issues appeared to be "largely policy-oriented rather than operational" does not render this a compelling element on BCOC's side of the balance. Nonetheless, in the circumstances here, these two negative elements are not sufficient to overcome the combined weight of factors one, two, and four as supporting a finding that the late-filing of these contentions does not bar their admission.

B. Application of 10 C.F.R. § 2.714(b), (d) Admissibility Criteria

In determining whether the four BCOC environmental contentions are admissible in accordance with the standards set forth in section 2.714(b) and (d), we note initially that we previously dismissed contentions denominated as EC-1 through EC-5 in our July 1999 ruling on BCOC's standing and the admissibility of its timely filed contentions. Three of the four BCOC late-filed contentions essentially track these issues, albeit with different numbers in two instances.[1] For the sake of clarity, in considering these four late-filed contentions we have renumbered them to continue the numbering sequence begun with the already-rejected environmental contentions. And below, we discuss the admissibility of each, beginning with renumbered contention EC-6.

1. CONTENTION EC-[6]: Environmental Impact Statement Required

> In the Environmental Assessment ("EA") for CP&L's December 23, 1998, license amendment application, the NRC Staff concludes that the proposed expansion of spent fuel storage capacity at the Shearon Harris nuclear power plant will not have a significant effect on the quality of the human environment. Environmental Assessment and Finding of No Significant Impact Related to Expanding the Spent Fuel Pool Stage Capacity at the Shearon Harris Nuclear Power Plant (TAC No. MA4432) at 10 (December 15, 2000). Therefore, the Staff has decided not to prepare an Environmental Impact Statement ("EIS") for the proposed license amendment. The Staff's decision not to prepare an EIS violates the National Environmental Policy Act ("NEPA") and NRC's implementing regulations, because the Finding of No Significant Impact ("FONSI") is erroneous and arbitrary and capricious. In fact, the proposed expansion of spent fuel pool storage capacity at Harris would create accident risks that are significantly in excess of the risks identified in the EA, and significantly in excess of accident risks previously evaluated by the NRC Staff in the EIS for the Harris operating license. These accident risks would significantly affect the quality of the human environment, and therefore must be addressed in an EIS.

[1] Originally-filed contention EC-2 corresponds to late-filed contention EC-1 and the previously submitted contention EC-5 corresponds to late-filed contention EC-4.

> There are two respects in which the proposed license amendment would significantly increase the risk of an accident at Harris:
>
> (1) CP&L proposes several substantial changes in the physical characteristics and mode of operation of the Harris plant. The effects of these changes on the accident risk posed by the Harris plant have not been accounted for in the Staff's EA. The changes would significantly increase, above present levels, the probability and consequences of potential accidents at the Harris plant.
>
> (2) During the period since the publication in 1979 of NUREG-0575, the NRC's Generic Environmental Impact Statement ("GEIS") on spent fuel storage[1], new information has become available regarding the risks of storing spent fuel in pools. This information shows that the proposed license amendment would significantly increase the probability and consequences of potential accidents at the Harris plant, above the levels indicated in the GEIS, the 1983 EIS for the Harris operating license, and the EA. The new information is not addressed in the EA or the 1983 EIS for the Harris operating license.
>
> Accordingly, the Staff must prepare an EIS that fully considers the environmental impacts of the proposed license amendment, including its effects on the probability and consequences of accidents at the Harris plant. As required by NEPA and Commission policy, the EIS should also examine the costs and benefits of the proposed action in comparison to various alternatives, including Severe Accident Mitigation Design Alternatives ("SAMDAs")and the alternative of dry storage.
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> [1] NUREG-0575, Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Power Reactor Fuel (August 1979) (hereinafter "GEIS").

BCOC Contentions Request at 1-2.

DISCUSSION: Id. at 1-16; CP&L Contentions Response at 7-20; Staff Contentions Response at 7-26; BCOC Contentions Reply at 8-19.

RULING: With this contention, BCOC challenges the staff's EA conclusion that the proposed CP&L license amendment to use spent fuel pools C and D does not require a complete EIS. In assessing the basis for this contention, we note that all three parties agree

that the standard for requiring that an EIS be prepared is whether the action at issue, in this case the CP&L license amendment, is a major federal action having a significant impact on the human environment. See BCOC Contentions Request at 3; CP&L Contentions Response at 3 n.3; Staff Contentions Response at 8. Further, all the parties agree that the agency is not required to address in an EIS consequences of an action that are "remote and speculative." See CP&L Contentions Response at 9-10; Staff Contentions Response at 16; BCOC Contentions Reply at 8. What the parties disagree about is whether a possible consequence of the action identified by BCOC -- a severe accident in spent fuel pools C and D -- is remote and speculative.

BCOC discusses a number of different elements that it asserts provide the basis for this contention, including the fact that the number of stored spent fuel assemblies at the Harris facility ultimately may double as a result of the proposed amendment; the purported impact of the use of "administrative measures" such as controlling fuel burnup levels rather than relying solely on "physical measures" such as fuel assembly separation and the presence of solid neutron absorbers to avoid criticality; and new information regarding sabotage risk. 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 BCOC 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.

To examine whether the contention provides an adequate basis to support further Board consideration of this question, we examine the accident scenario in question, which was first summarized by CP&L, see CP&L Contentions Response at 9-10, with an appropriate modification by BCOC, see BCOC Contentions Reply at 8. In this regard, BCOC postulates the following chain of events:

(1) a degraded core accident;
(2) containment failure or bypass;
(3) loss of all spent fuel cooling and makeup systems;
(4) extreme radiation doses precluding personnel 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 oxidation reaction in pools C and D.

Relative to this accident sequence, what BCOC asserts, and what the CP&L and the staff contest, is that BCOC has established an adequate basis to allow merits litigation on whether this sequence is not "remote and speculative" so that a further environmental analysis of the CP&L pool expansion amendment request is required.

In considering this question, we note that the Commission has provided some guidance regarding such an issue statement in its decision in Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-90-4, 31 NRC 333 (1990). In that case, which also involved the expansion of a spent fuel pool, likewise at issue was the admission of a contention that asserted the license amendment involved required the preparation of an environmental impact statement because the action raised the potential for a substantial release of radioactive material following the occurrence of a specific accident sequence. More specifically, the question in dispute was whether the accident sequence specified was of a sufficiently high probability to put it beyond the "remote and speculative" threshold for the purpose of admitting the contention.

Prior to coming before the Commission, however, that contention was considered by both the Licensing Board and the Appeal Board, with the matter coming before the Appeal Board on referral from the Licensing Board's admission of the contention. See Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29 (1989). The Appeal Board determined that:

> The essence of Environmental Contention 1 . . . is that an environmental impact statement is required for the proposed

> license amendment to assess the risks of the following hypothetical accident scenario: (1) a severe reactor accident occurs by some unidentified mechanism and involves substantial fuel damage, hydrogen generation, Mark I containment failure, and subsequent detonation in the reactor building where the Vermont Yankee fuel pool is located; (2) the reactor building and the spent fuel pool are assuredly not likely to withstand the pressure and temperature loads generated by such an accident, thereby threatening the pool cooling systems or the pool structure itself, . . . and (3) pool heatup occurs, resulting in a self-sustaining zircaloy cladding fire with increased long-term health effects for the public from the increased fuel pool inventory.

Id. at 43 (citations omitted). The Appeal Board then went on to say that the scenario on which the contention is premised "is obviously not a 'normal' operating event; indeed it can be characterized as a double 'worst case' accident." Id. Consequently, after what it considered to be a careful examination of the bases presented for the accident scenario, the Appeal Board rejected the contention and referred its ruling to the Commission. See id. at 52.

The Commission responded by remanding the issue to the Appeal Board for further consideration, saying:

> The Commission believes that on remand more information on the plausibility or probability of the reactor accident/hydrogen combustion/spent fuel pool cooling failure/cladding fire at issue here . . . is needed before a judgment should be made whether the accident . . . is remote and speculative. As part of our remand we therefore direct the Appeal Board to develop such information further. We leave it to the Appeal Board to decide the procedural means to obtain this information, whether by inviting something akin to summary disposition motions or otherwise. If the Appeal Board finds that an accident probability on the order of 10^{-4} per 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.

CLI-90-04, 31 NRC at 335-36 (citations omitted).

There followed an Appeal Board request for clarification of the Commission's decision. See ALAB-938, 32 NRC 154 (1990). But before the Commission could respond, the

intervenors asked to withdraw from the proceeding and the licensee moved to dismiss the proceeding. The Commission granted the motion to dismiss, but opined that it was

> concerned that the probability that the Appeal Board found to be so low as to be remote and speculative pertained not to the whole scenario in the contention but to pieces of the scenario in the contention or related scenarios set out in the technical documents, some with probabilities as high as on the order of 10^{-4} per reactor year. In ALAB-919, the Appeal Board bridged the gap between the technical documents and the scenario in the contention by assuming, conservatively, that the probability of that scenario could be no greater than certain scenarios actually analyzed in the documents. If the scenarios in the documents were remote and speculative, then, a fortiori, the scenario in the contention must be remote and speculative as well. 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.

CLI-90-7, 32 NRC 129, 132 (footnote omitted).

Certainly, in the intervening decade the Commission has come to rely on probabilistic analysis ever more heavily in the process of making decisions. Indeed, the entire trend in licensing, enforcement, inspection and the granting of amendments has swung gradually toward decision-making by probabilistic risk assessment. We therefore think that the Commission's intent is at present even more firmly directed to deciding what is "remote and speculative" by examining the probabilities inherent in a proposed accident scenario.

In this instance, based on the information now presented by BCOC, including the 1993 Harris facility individual plant evaluation (IPE) of core damage frequency, the accident scenario it has postulated may have a probability in the range of 1×10^{-5} per reactor year, see BCOC Contentions Reply at 11-12, a figure that under the Commission's guidance seemingly should not be dismissed automatically as per se "remote and speculative." To be sure, CP&L and the staff dispute various aspects of the BCOC probability analysis and its underlying accident scenario, including whether cooling water restoration would be precluded by onsite radiation

levels; the availability of water makeup systems; bounding decay heat levels for pools C and D; the age of the spent fuel that will be stored in pools C and D; whether the probability of a substantial SFP release is on a par with the probability of a substantial reactor release; the effect of the use of burnup credit; and an increase in sabotage-related risk. And we agree with CP&L and the staff that BCOC's assertions regarding sabotage risk do not provide a litigable basis for this contention. See Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 701 (1985), review declined, CLI-86-5, 23 NRC 125 (1986), aff'd, Limerick Ecology Action v. NRC, 869 F.2d 719, 744 (3d Cir. 1989). We find, however, that the information provided by BCOC otherwise is sufficient to establish a genuine material dispute of fact or law adequate to warrant further inquiry relative to the other aspects of the BCOC scenario and the associated probability analysis.[2] Accordingly, we admit contention EC-6 as it relates to this accident sequence.[3]

Finally, in connection with further litigation on this contention, we offer the following additional observations. In its Vermont Yankee decision, the Commission directed the Appeal Board to select a "procedural means" to obtain the risk-informed information and suggested "something akin" to inviting summary disposition motions. CLI-90-04, 31 NRC at 336. In this instance, pursuant to 10 C.F.R. § 2.1109, CP&L has invoked the process set forth in Subpart K

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[2] In this regard, we note that in our decision in LBP-00-12, 51 NRC at 259-60, in ruling on the two admitted BCOC technical contentions, we found CP&L's planned use of so-called "administrative processes," such as use of enrichment/burnup level controls and soluble boron as SFP criticality control measures, is permitted under General Design Criteria (GDC) 62. As a consequence, contrary to BCOC's assertion, the use of such measures does not, in and of itself, trigger the need for an EIS. Whether, and to what extent, the use of these control measures has any relevance to the probability calculation at issue here is a matter for resolution as part of 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.

[3] In its final sentence, the contention includes a statement about what should be analyzed in an EIS. For the reasons stated below relative to contentions EC-7 and EC-8, we consider this aspect of the contention premature and do not admit it.

to Part 2 that includes the written summaries and oral argument specified in sections 2.1109 and 2.1113. Certainly, these procedures are sufficiently "akin" to summary disposition to satisfy the Commission's previously stated preference.

Additionally, so that we will be able properly to assess the significance of the materials submitted in the detailed written summaries required by section 2.1113(a), we ask that the parties address the following points:

1. What is the submitting party's best estimate of the overall probability of the sequence set forth in the chain of seven events in the CP&L and BCOC's filings, set forth on page 13 supra? The estimates should utilize plant-specific data where available and should utilize the best available generic data where generic data is relied upon.

2. The parties should take careful note of any recent developments in the estimation of the probabilities of the individual events in the sequence at issue. In particular, have new data or models suggested any modification of the estimate of 2×10^{-6} per year set forth in the executive summary of NUREG-1353, Regulatory Analysis for the Resolution of Generic Issue 82, Beyond Design Basis Accidents in Spent Fuel Pools (1989)? Further, do any of the concerns expressed in the ACRS's April 13, 2000 letter suggest that the probabilities of individual elements of the sequence are greater than those previously analyzed (e.g., is the chance of occurrence of sequence element seven, an exothermic reaction, greater than was assumed in the decade-old NUREG-1353)?

3. Assuming the Board should decide that the probability involved is of sufficient moment so as not to permit the postulated accident sequence to be classified as "remote and speculative," what would be the overall scope of the environmental impact analysis the staff would be required to prepare (i.e, limited to the impacts of that accident sequence or a full blown EIS regarding the amendment request)?

2. Contention EC-[7]: EIS Should Consider Cumulative Impacts In Light of New Information

> The EA is deficient because it fails to acknowledge or evaluate the significant cumulative environmental risk posed by the operation of pools A, B, C, and D.

BCOC Contentions Request at 16.

DISCUSSION: Id. at 17-18; CP&L Contentions Response at 20-25; Staff Contentions Response at 26-27; BCOC Contentions Reply at 20-21.

RULING: We find this contention premature, given that there is still an outstanding question whether the staff correctly concluded in its EA that no environmental impact statement is required. See LBP-99-25, 50 NRC at 39. If, in ruling on the merits of contention EC-6, we should determine that an EIS is necessary, then the proper scope of that EIS would become a matter in controversy based on the CP&L environmental report (assuming the staff requires that one be prepared) and the EIS the staff prepares.

3. Contention EC-[8]: Scope of EIS Should Include Brunswick and Robinson Storage

> The EIS for the proposed license amendment should include within its scope the storage of spent fuel from the Brunswick and Robinson nuclear power plants.

BCOC Contentions Request at 18.

DISCUSSION: Id. at 18-19; CP&L Contentions Response at 25-28; Staff Contentions Response at 27-28; BCOC Contentions Reply at 21.

RULING: As with contention EC-7, we decline to admit this contention as premature.

4. Contention EC-[9]: Discretionary EIS Warranted

> Even if the Licensing Board determines that an EIS is not required under NEPA and 10 C.F.R. § 51.20(a), the Board should nevertheless require an EIS as an exercise of its discretion, as permitted by 10 C.F.R. §§ 51.20(b)(14) and 51.22(b).

BCOC Contentions Request at 20.

DISCUSSION: Id. at 20-23; CP&L Contentions Response at 28-30; Staff Contentions Response at 28-29; BCOC Contentions Reply at 21-22.

RULING: We have carefully considered whether such a discretionary EIS is warranted and we see no reason to require an EIS if one is not required by the rules. We recognize that CP&L and the staff assert that such a requirement is ultra vires for this Board. See CP&L Contentions Response at 28; Staff Contentions Response at 28. We, however, need not rule

on that point. Suffice it to say that we find no "special circumstances" pursuant to sections 51.20(b)(14) and 51.22(b) that would warrant a discretionary EIS.

III. ADMINISTRATIVE MATTERS

As we previously noted, under 10 C.F.R. § 2.1109, CP&L has invoked the procedural provisions of Part 2, Subpart K, relative to the litigation of this proceeding. Accordingly, the schedule for utilizing the Subpart K procedures in connection with contention EC-5 is as follows:

Discovery Begins	Monday, August 21, 2000
Discovery Ends	Friday, October 20, 2000
Written Summaries Filed	Monday, November 20, 2000

The discovery limitations and guidelines set forth in our July 29, 1999 issuance shall apply.[4] See Licensing Board Memorandum and Order (Granting Request to Invoke 10 C.F.R. Part 2, Subpart K Procedures and Establishing Schedule) (July 29, 2000) at 3-4. Moreover, the Board will establish a date and location for conducting oral argument regarding the parties' written summaries in a subsequent order.

[4] As with the admitted technical contentions, the Board is not requiring that informal discovery must be used during the discovery period. Nonetheless, the Board notes that the parties need not await the beginning of the discovery period to initiate discussions regarding the nature and scope of the information each will be seeking in discovery and try to reach some agreement on documentary or other materials that can be provided without a formal discovery request.

Also, in connection with discovery in this proceeding, the Board notes that any attempt to obtain discovery materials or testimony from ACRS members, staff, or consultants is subject to the exceptional circumstances showing of 10 C.F.R. § 2.720(h). See Pacific Gas & Electric Co. (Dabble Canyon Nuclear Power Plant, Units 1 and 2), ALAB-519, 9 NRC 42, 43 n.2 (1979). Moreover, the Board directs that any discovery requests regarding ACRS information or personnel must be filed within the first ten days of the discovery period established above.

IV. CONCLUSION

With these new proposed environmental contentions being filed within forty-five days of the challenged staff EA, the five-factor balancing test set forth in 10 C.F.R. § 2.714(a)(1) favors the admission of BCOC renumbered late-filed contentions EC-6 through EC-8. Additionally, we find that BCOC has established relative to contention EC-6 regarding "remote and speculative" SFP accident sequences that there exists a genuine material dispute of fact or law adequate to warrant further inquiry. We thus admit contention EC-6 and establish a schedule for its further litigation under 10 C.F.R. Part 2, Subpart K. On the other hand, we dismiss contentions EC-7 and EC-8, which concern the scope of any staff EIS that may be needed, as premature, and dismiss contention EC-9, which concerns the need for a discretionary EIS, as lacking adequate support to show there exists a genuine material dispute of fact or law adequate to warrant further inquiry.

For the foregoing reasons, it is this seventh day of August 2000, ORDERED that:

1. The following BCOC contention is admitted for litigation in this proceeding: EC-6.

2. The following BCOC contentions are rejected as inadmissible for litigation in this proceeding: EC-7, EC-8, and EC-9.

3. The parties are to conduct discovery and submit section 2.1113 written presentations in accordance with the schedule established in section III above.

FOR THE ATOMIC SAFETY
AND LICENSING BOARD[5]

/RA/

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

/RA/

Frederick J. Shon
ADMINISTRATIVE JUDGE

/RA/

Dr. Peter S. Lam
ADMINISTRATIVE JUDGE

Rockville, Maryland

August 7, 2000

[5] Copies of this memorandum and order were sent this date by Internet e-mail transmission to counsel for (1) applicant CP&L; (2) intervenor BCOC; and (3) the staff.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
CAROLINA POWER & LIGHT COMPANY	)	Docket No. 50-400-LA
	)	
(Shearon Harris Nuclear Power Plant)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB MEMORANDUM AND ORDER (RULING ON LATE-FILED ENVIRONMENTAL CONTENTIONS) (LBP-00-19) have been served upon the following persons by U.S. mail, first class, or through NRC internal distribution.

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Washington, DC 20555-0001

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[Original signed by Adria T. Byrdsong]

Office of the Secretary of the Commission

Dated at Rockville, Maryland,
this 7th day of August 2000