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RELATED CORRESPONDENCE

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
Before the Atomic Safety and Licensing Board

OFFICE OF THE  
SECRETARY  
ADJUDY

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

**APPLICANT'S FIRST SET OF DISCOVERY REQUESTS DIRECTED TO THE  
BOARD OF COMMISSIONERS OF ORANGE COUNTY**

Pursuant to the Board's July 29, 1999 Memorandum and Order (Granting Request to Invoke 10 C.F.R. Part 2, Subpart K Procedures and Establishing Schedule), Applicant Carolina Power & Light Company ("CP&L") hereby requests the Board of Commissioners of Orange County, North Carolina ("BCOC") to answer the following General Interrogatories separately, fully, in writing, and under oath within 14 days after service of this discovery request (not later than Monday, August 30, 1999), and to produce the documents requested below within 30 days after service of this discovery request (not later than Wednesday, September 15, 1999).

**I. DEFINITIONS AND INSTRUCTIONS**

1. Scope of Discovery. These interrogatories and document production requests cover all information in the possession, custody and control of BCOC, including information in the possession of commissioners, officers, employees, agents, representatives, investigators, attorneys, or other persons directly or indirectly employed

or retained by them or voluntarily working with them (such as David A. Lochbaum of the Union of Concerned Scientists), or anyone else acting on BCOC's behalf or otherwise subject to its control. The discovery sought by this request encompasses material contained in, or which might be derived or ascertained from, the personal files of BCOC commissioners, officers, employees, agents, representatives, investigators, attorneys, or other persons directly or indirectly employed or retained by them, working with them, or acting on BCOC's behalf.

2. Lack of Information. If you currently lack information to answer any Interrogatory completely, please state:

1. The responsive information currently available;
2. The responsive information identified but currently unavailable; and
3. When you anticipate receiving such information currently unavailable.

3. Supplementation of Responses. Each of the following requests is a continuing one by agreement of the parties and pursuant to 10 C.F.R. § 2.740(e)(3). CP&L thereby requests that, in the event prior to the close of discovery on October 31, 1999, as directed by the Board, BCOC obtains or discovers any additional information which is responsive to any discovery requests, BCOC promptly supplement its responses to these requests. The supplementation duties of 10 C.F.R. § 2.740(e)(1) (persons having knowledge and experts) and 10 C.F.R. § 2.740(e)(2) (known incorrect responses) are continuing and unaffected by the parties' agreement.

4. Objections. In the event that BCOC objects to any interrogatory, request for admission, or document production request under claim of privilege, immunity, or for any other reason, please indicate the basis for asserting the objection, the person on whose behalf the objection is asserted, and describe the factual basis for asserting the objection in sufficient detail so as to permit CP&L to consider, and the Board to ascertain, the validity of such objection.

5. Privilege Log. If you withhold any document covered by this request under a claim of privilege, immunity, or for any other reason, please furnish a privilege log identifying each document for which the privilege, immunity, or other reason is asserted, together with the following information: date, author and affiliation, recipient and affiliation, persons to whom copies were furnished and their affiliation, the subject matter of the document, the basis for asserting the privilege, immunity, or other reason, and the name of the person on whose behalf the privilege, immunity, or other reason is asserted.

6. Estimates. Interrogatories calling for numerical or chronological information shall be deemed, to the extent that precise figures or dates are not known, to call for estimates. In each instance that an estimate is given, it should be identified as such together with the source of information underlying the estimate.

7. Board of Commissioners of Orange County. "BCOC," "Orange County," "intervenor," "you," and "your" means any branch, department, division, or other organized entity of the Board of Commissioners of Orange County, including its commissioners, officers, employees, agents, representatives, investigators, attorneys, or

other persons directly or indirectly employed or retained by BCOC or voluntarily working with BCOC (such as David A. Lochbaum of the Union of Concerned Scientists), or anyone else acting on BCOC's behalf or otherwise subject to its control.

8. Documents. The term "documents" means the complete original or a true, correct, and complete copy and any non-identical copies, whether different by reason of any notation or otherwise, of any written or graphic matter of any kind, no matter how produced, recorded, stored, or reproduced (including electronic, mechanical, or electronic records or representation of any kind) including, but not limited to, any writing, letter, telegram, facsimile, meeting minutes, meeting notes, memorandum, statement, book, record, survey, map, study, handwritten note, working paper, chart, tabulation, graph, tape, data sheet, data processing card, printout, microfilm or microfiche, interoffice and intraoffice communications, instructions, reports, demands, schedules, notices, recordings, analyses, sketches, manuals, brochures, telephone minutes, calendars, accounting ledgers, invoices, indices, notebooks, personal notes, diary entries, e-mail, notes of interview, communication, contracts, any other agreements, data compilations, and all other writings and papers similar to any of the foregoing, however designated by you, including all drafts of all such documents. The phrase "data compilation" includes, but is not limited to, any material stored on or accessible through a computer or other information storage or retrieval system, including videotapes, computer files and disks, and tape recordings. If the document has been prepared and several copies or additional copies have been made that are not identical (or are no longer identical by reason of the

subsequent addition of notations or other modifications), each non-identical copy is to be construed as a separate document.

9. Date. "Date" means the specific day, month, and year, if ascertainable, or if not, the best approximation thereof (including by relationship to other events), and the basis for such approximation.

10. Discussion. "Discussion" means communication of any kind, including but not limited to, any spoken, written, or signed form of communication.

11. Person. "Person" means any individual, association, group, corporation, partnership, joint venture, or any other business or legal entity.

12. All Documents. "All documents referring or relating to" means all documents that in whole or in part constitute, contain, embody, reflect, identify, state, interpret, discuss, describe, explain, apply to, deal with, evidence, or are in any way pertinent to a given subject.

13. And and Or. "And" and "or" include the conjunctive "and" as well as the disjunctive "or" and the words "and/or."

14. Describe or Identify. The words "describe" or "identify" shall have the following meanings:

- (a) In connection with a person, the words "describe" or "identify" mean to state the name, last known business address, last known business telephone number, and last known place of employment and job title;

- (b) In connection with a document, the words “describe” or “identify” mean to give a description of each document sufficient to uniquely identify it among all of the documents related to this matter, including, but not limited to, the name of the author of the document, the date and title of the document, and identification numbers applicable to the document, the name of each person or entity signing or approving the document, the date on which the document was prepared, signed, and/or executed, and any other information necessary to adequately identify the document;
- (c) In connection with an entity other than a natural person (e.g., corporation, partnership, limited partnership, association, institution, etc.), the words “describe” or “identify” mean to state the full name, address and telephone number of the principal place of business of such entity;
- (d) In connection with any activity, occurrence, or communication, the words “describe” or “identify” mean to describe the activity, occurrence, or communication, the date of its occurrence, the identify of each person alleged to have had any involvement with or knowledge of the activity, occurrence, or communication, and the identity of any document recording or documenting such activity, occurrence, or communication.

### **III. GENERAL INTERROGATORIES**

Pursuant to agreement between CP&L and BCOC, these general interrogatories apply to both of BCOC’s admitted contentions, are in addition to the fifteen

interrogatories per contention allowed by the Board's July 29, 1999, Memorandum and Order, and are continuing in accordance with 10 C.F.R. § 2.740(e) through the end of the discovery period, October 31, 1999, as established in the Board's July 29, 1999 Memorandum and Order.

**GENERAL INTERROGATORY NO. 1.** State the name, business address, and job title of each person who supplied information for responding to these interrogatories, requests for admission, and requests for the production of documents. Specifically note for which interrogatories and requests for admissions each such person supplied information. For requests for production, note for which contention each such person supplied information.

**GENERAL INTERROGATORY NO. 2.** For each admitted BCOC contention, give the name, address, profession, employer, area of professional expertise, and educational and scientific experience of each person whom BCOC expects to provide sworn affidavits and declarations in the written filing for the Subpart K proceeding described in the Board's July 29, 1999, Memorandum and Order and the general subject matter on which each person is expected to provide sworn affidavits and declarations for the written filing. For purposes of answering this interrogatory, the educational and scientific experience of expected affiants and declarants may be provided by a resume of the person attached to the response.

**GENERAL INTERROGATORY NO. 3.** For each admitted BCOC contention, identify each expert on whom BCOC intends to rely on in its written filing for the

Subpart K proceeding described in the Board's July 29, 1999 Memorandum and Order, the general subject matter on which each expert is expected to provide sworn affidavits and declarations for the written filing, the qualifications of each expert whom BCOC expects to provide sworn affidavits and declarations for the written filing, a list of all publications authored by the expert within the preceding ten years, and a listing of any other cases in which the expert has testified as an expert at a trial, hearing or by deposition within the preceding four years.

#### **IV. GENERAL DOCUMENT PRODUCTION REQUESTS**

The Applicant requests BCOC to produce the following documents:

**REQUEST NO. 1.** All documents that are identified, referred to or used in responding to all of the above general interrogatories and subsequent interrogatories and requests for admissions relating to specific contentions.

**REQUEST NO. 2.** All documents relating to each admitted BCOC contention, and to the extent possible, segregated by contention and separated from already produced documents.

**REQUEST NO. 3.** All documents (including experts' opinions, workpapers, affidavits, and other materials used to render such opinion) supporting or otherwise relating to the written filing and oral argument that you intend to use in your Subpart K presentation on each admitted BCOC contention.

**REQUEST NO. 4.** All documents relating to any meeting of the Board of Commissioners of Orange County at which the subject of the admitted BCOC



contentions was discussed, including any documents relating to the assertion that the admitted BCOC contentions constitute public health and safety issues.

**V. SPECIFIC DOCUMENT PRODUCTION REQUESTS**

The Applicant requests BCOC to produce the following documents:

**A. TECHNICAL CONTENTION 2 – Criticality Prevention**

**REQUEST NO. 1.** All documents relating to the claims raised by BCOC, as admitted by the Board, in Technical Contention 2 (“Contention 2”).

**REQUEST NO. 2.** All documents considered or relied upon by any expert or consultant assisting BCOC in developing the claims raised by BCOC, as admitted by the Board, in Contention 2.

**REQUEST NO. 3.** All documents relied upon by BCOC to support its position that the use of enrichment and burnup limits for criticality control in spent fuel pools, implemented in part by administrative controls, is not permitted by General Design Criterion (“GDC”) 62.

**REQUEST NO. 4.** All documents relied upon by BCOC to support its position that a fuel assembly misplacement, involving a fuel assembly of the wrong burnup or enrichment, could cause criticality in Harris spent fuel pools C & D.

**REQUEST NO. 5.** All documents relating to the interpretation of GDC 62 regarding the use of enrichment and burnup limits for criticality control in spent fuel pools.

**REQUEST NO. 6.** All documents relating to the interpretation of the provisions of Draft Regulatory Guide 1.13 ("Reg. Guide 1.13") regarding the use of burnup credit for criticality control in spent fuel pools.

**REQUEST NO. 7.** All documents that state, imply, or infer that the Nuclear Regulatory Commission ("NRC") agrees or disagrees with the NRC staff's position on the use of burnup credit for criticality control in spent fuel pools, including the NRC staff's position on the use of burnup credit in Reg. Guide 1.13.

**REQUEST NO. 8.** All documents that state, imply, or infer that the NRC might be uninformed or unaware of the NRC staff's position on the use of burnup credit for criticality control in spent fuel pools, including the staff's position in Reg. Guide 1.13.

**REQUEST NO. 9.** All documents that state, imply, or infer that the NRC might be informed or aware of the NRC staff's position on the use of burnup credit for criticality control in spent fuel pools, including the staff's position in Reg. Guide 1.13.

**REQUEST NO. 10.** All documents relating to criticality calculations for spent fuel pools relying on enrichment and burnup limits for criticality control.

**REQUEST NO. 11.** All documents relating to the use of administrative controls to prevent misplacement or inappropriate placement of fuel assemblies in spent fuel pools.

**REQUEST NO. 12.** All documents relating to Dr. Gordon Thompson's ("Dr. Thompson") assertion in the prehearing conference that "the probability of a criticality accident will be significantly increased if pools C and D are activated."

**REQUEST NO. 13.** With regard to Ms. Diane Curran's statement during the prehearing conference that Dr. Thompson's assertions regarding spent fuel pool accidents were based on analyses, rather than just expert opinion, provide all documents relating to analyses of:

- a) Probability of criticality accidents in Harris spent fuel pools C & D;
- b) Consequences from such accidents;
- c) Release of specific inventories from such accidents; and
- d) Mitigating factors for such accidents, including both design and administrative measures.

**REQUEST NO. 14.** With regard to the potential for inadvertent dilution of boron in the Harris spent fuel pools, provide all documents relating to the potential for a boron excursion (dilution) in the spent fuel pools, including:

- a) Mechanism to accomplish dilution, including, but not limited to, the source and quantity of water required to accomplish dilution;
- b) Basis for assumptions that dilution could credibly occur, including whether such an event would be noticed and would be halted; and
- c) Criticality analyses identifying dilution limits required to achieve criticality.

**REQUEST NO. 15.** All documents relating to the potential health and safety impacts of any failure in the criticality control methodology for Harris spent fuel pools C & D, including all documents relating to assumptions regarding mitigating actions which could be taken by the Applicant following the postulated event.

**B. TECHNICAL CONTENTION 3 – Quality Assurance**

**REQUEST NO. 1.** All documents relating to the claims raised by BCOC, as admitted by the Board, in Technical Contention 3 (“Contention 3”).

**REQUEST NO. 2.** All documents considered or relied upon by any expert or consultant assisting BCOC in developing the claims raised by BCOC, as admitted by the Board, in Contention 3.

**REQUEST NO. 3.** All documents relied upon by BCOC to support its position that the use of previously completed portions of the Unit 2 Fuel Pool Cooling and Cleanup System to provide cooling of Harris spent fuel pools C & D fails to satisfy the quality assurance criteria of 10 C.F.R. Part 50, Appendix B.

**REQUEST NO. 4.** All documents relied upon by BCOC to support its position that the Alternative Plan submitted by the Applicant fails to satisfy the requirements of 10 C.F.R. § 50.55a.

**REQUEST NO. 5.** All documents relied upon by BCOC to support its position that the Alternative Plan is deficient because inspection of welds in piping embedded in concrete cannot be adequately accomplished with a remote camera.

**REQUEST NO. 6.** All documents relied upon by BCOC to support its position that the Alternative Plan is deficient because not all welds in concrete will be inspected by the remote camera, and the weld quality cannot be demonstrated adequately by inferential evidence.

**REQUEST NO. 7.** All documents relating to BCOC's position that the 10 C.F.R. § 50.55a Alternative Plan is required to include an exception to the requirements in 10 C.F.R. Part 50, Appendix B, even though 10 C.F.R. § 50.55a addresses only the ASME Boiler and Pressure Vessel Code.

**REQUEST NO. 8.** All documents relating to BCOC's position that treated, demineralized water can lead to the same microbiologically induced corrosion ("MIC") development that has been identified for raw, untreated water systems.

**REQUEST NO. 9.** All documents relating to BCOC's position that the cooling piping for Harris spent fuel pools C & D will not be able to perform its intended safety function if the Applicant's 10 C.F.R. § 50.55a Alternative Plan is approved.

**REQUEST NO. 10.** All documents relied upon by Dr. Thompson to support his position that a failure to satisfy ASME Boiler and Pressure Vessel Code Section III requirements for the piping in the Harris Fuel Pool Cooling and Cleanup System could increase the probability of a design-basis accident in spent fuel pools C & D.

**REQUEST NO 11.** With regard to the "Declaration of David A. Lochbaum, Nuclear Safety Engineer, Union of Concerned Scientists, Concerning Technical Issues and Safety Matters Involved in the Harris Nuclear Plant License Amendment for Spent Fuel Storage," dated March 31, 1999, provide:

- a) All documents relied upon or which informed Mr. David A. Lochbaum's ("Mr. Lochbaum") statements.

- b) All documents in Mr. Lochbaum's possession, custody or control relating to Contention 3.
- c) All communications between BCOC and the Union of Concerned Scientists relating to Contention 3.
- d) All documents relating to MIC in piping.
- e) All documents which inform or explain Mr. Lochbaum's opinion that "the risk to the general public could be increased by the proposed activity, and that the risks and potential are foreseeable, not high speculative and potentially significant."

**REQUEST NO. 12.** All documents relating to the assertion that embedded piping might be subject to degradation as a result of extended storage, including:

- a) All documents relating to specific degradation mechanisms which BCOC considers to be credible;
- b) All documents relating to the possibility that any such degradation mechanism might exist for the conditions and configuration of the cooling system for Harris spent fuel pools C & D;
- c) All documents relating to BCOC's assertion that any such degradation mechanisms could not be identified through an internal examination of piping using a remote camera;
- d) All documents relating to the identity and credentials of individuals offering expert opinion for BCOC on issues pertaining to corrosion or degradation of piping.

**REQUEST NO. 13.** With regard to BCOC's discussion of weld inspection at the prehearing conference, provide all documents relating to the identity and credentials of individuals involved with the evaluation of weld adequacy and weld inspection techniques. As Dr. Thompson was specifically identified as providing his professional opinion on these matters (see Trans. at 87-88), provide all documents relating to Dr. Thompson's credentials to speak as an authority on these subjects, including all documents relating to any formal training specific to the design, performance, inspection, qualification, or evaluation of weldments. Provide all documents relating to piping design requirements (i.e., stress, temperature, pressure) taken into consideration by Dr. Thompson or others in assessing the adequacy of the embedded welds in the cooling system piping for Harris spent fuel pools C & D.

**REQUEST NO. 14.** Provide all documents relating to BCOC's assertion that embedded welds were not constructed in full compliance with the NRC's requirements.

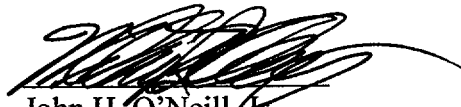
**REQUEST NO. 15.** Provide all documents relating to the identity and credentials of any individual(s) who will attest to issues pertaining to the quality of the piping and equipment in question.

**REQUEST NO. 16.** Provide all documents relating to the identity and credentials of individual(s) who will provide expert opinion or first hand knowledge regarding the quality of Harris Plant construction of the cooling system to be used for pools C & D and regarding adherence to the Harris construction Quality Assurance program.

**REQUEST NO. 17.** All documents relating to the potential health and safety impacts of any failure in the piping of the Fuel Pool Cooling and Cleanup System for Harris spent fuel pools C & D, including all documents relating to assumptions regarding mitigating actions which could be taken by the Applicant following the postulated event.

Respectfully submitted,

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Dated: August 16, 1999



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'99 AUG 18 P4:08

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**  
Before the Atomic Safety and Licensing Board

OFFICE OF SECRETARY  
RULEMAKING AND  
ADJUDICATIONS

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

**CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing "Applicant's First Set of Discovery Requests Directed to the Board of Commissioners of Orange County," dated August 16, 1999, was served on the persons listed below by U.S. mail, first class, postage prepaid, and by electronic mail transmission, this 16th day of August, 1999.

G. Paul Bollwerk, III, Esq., Chairman  
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Attention: Rulemakings and Adjudications  
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\* by mail only



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