

**RELATED CORRESPONDENCE**

DOCKETED  
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September 17, 1999

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

OFFICE OF THE  
GENERAL COUNSEL  
ADJUDICATIONS OFFICE

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

**ORANGE COUNTY'S RESPONSES TO APPLICANT'S  
FIRST SET OF DOCUMENT PRODUCTION REQUESTS**

Orange County hereby responds to the document production requests contained in Applicant's First Set of Discovery Requests Directed to the Board of Commissioners of Orange County (August 16, 1999). Pursuant to an agreement by the parties, this response is being filed two days late. Responsive documents will be produced at the offices of Harmon, Curran, Spielberg, and Eisenberg upon arrangement by the parties.

Orange County notes that, at this early stage of the proceeding, when it has not yet been able to review the documents produced by the Applicant, the technical documents in the County's possession that are responsive to these requests largely consist of pleadings that already have been filed on the public record of this case. Copies of these pleadings are being produced as part of Orange County's discovery response.

The County is aware of its responsibility to supplement its response to these document production requests as it obtains more information.

**I. RESPONSE TO GENERAL INTERROGATORIES**

**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.

**ORANGE COUNTY'S RESPONSE:** The individuals who provided information in response to document production requests is noted in response to each such request.

**II. RESPONSE TO GENERAL DOCUMENT PRODUCTION REQUESTS**

**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.

**ORANGE COUNTY'S RESPONSE:** These documents, consisting of the resumes of Dr. Thompson and Mr. Lochbaum, and a list of Dr. Thompson's publications, were previously provided as attachments to Orange County's Objections to Applicant's First Set of Discovery Requests and Response to Applicant's First Set of Interrogatories (August 30, 1999), and Orange County's Supplemental Response to Applicant's First Set of Interrogatories (September 3, 1999). Dr. Thompson and Mr. Lochbaum supplied this information.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr. Thompson and Mr. Lochbaum supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County has not determined what information it intends to include in its Subpart K presentation, and thus has no responsive information at this time.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Paul Thames, Orange County Engineer, and Geoffrey Gledhill, Orange County attorney, provided information responsive to this request.

### **III. SPECIFIC DOCUMENT PRODUCTION REQUESTS**

#### **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").

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr. Thompson supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents

responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr.

Thompson supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County objects to this request to the extent that it requires the production of regulations, legal opinions, legal memoranda, or other evidence of Orange County's legal opinions. To the extent that BCOC's position is based on factual documents, it will produce documents responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr. Thompson supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr. Thompson supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County objects to this request to the extent that it calls for documents containing legal conclusions by Orange County, which are not subject to discovery. Orange County will produce all other documents responsive

to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr. Thompson supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr. Thompson supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** At this writing, Orange County has no documents responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** At this writing, Orange County has no documents responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** At this writing, Orange County has no documents responsive to this request.

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

**ORANGE COUNTY'S RESPONSE:** At this writing, Orange County has no

documents responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr. Thompson supplied information responsive to this request.

**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."

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr. Thompson supplied information responsive to this request.

**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

Mitigating factors for such accidents, including both design and administrative measures.

**ORANGE COUNTY'S RESPONSE:** Orange County objects to this request, in that it appears to misconstrue what was said by counsel for the Applicant. Because the Applicant gives no citation for the alleged statement, Orange County does not have an adequate basis to evaluate it. In any event, the May 13, 1999, prehearing conference transcript shows that counsel for the County stated that the County's experts have not

performed any criticality analyses involving misplacement of a spent fuel pool assembly.

*Id.* at 92. Thus, Orange County does not have documents responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** At this writing, Orange County has no documents responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** At this writing, Orange County has no documents responsive to this request.

**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”).

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr. Thompson and Mr. Lochbaum supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents

responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr.

Thompson and Mr. Lochbaum supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** At this writing, Orange County has no

documents responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents

responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr.

Thompson and Mr. Lochbaum supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents

responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr.

Thompson and Mr. Lochbaum supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents

responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr.

Thompson and Mr. Lochbaum supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County objects to this request because it calls for a legal conclusion by Orange County.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County objects to this request to the extent that it mischaracterizes the County's position. The request is also objectionably vague, because it does not provide any citation to the document where the County allegedly takes this position. Nonetheless, Orange County will produce documents in its possession concerning when and whether MIC may occur at plants where treatment and demineralization of water have been conducted.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr. Thompson and Mr. Lochbaum supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents

responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr.

Thompson and Mr. Lochbaum supplied information responsive to this request.

**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."

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents

responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr.

Thompson and Mr. Lochbaum supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County will produce documents

responsive to this request at the offices of Harmon, Curran, Spielberg, and Eisenberg. Dr.

Thompson and Mr. Lochbaum supplied information responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** The County objects to this request to the extent that it calls for legal conclusions by Orange County and Dr. Thompson. To the extent the request calls for factual information, a copy of Dr. Thompson's resume was provided previously. The County has no other documents responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County objects to this request, because it mistakenly characterizes the County's position, and fails to provide any citation to where the position was taken. Orange County's concerns relate to the documentation of weld construction. Nonetheless, the County responds that it has no documents that relate to noncompliant construction of the welds.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County has not yet determined the precise subject of its Subpart K presentation or testimony, and therefore at this time it has no documents responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** Orange County has not yet determined the precise subject of its Subpart K presentation or testimony, and therefore at this time it has no documents responsive to this request.

**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.

**ORANGE COUNTY'S RESPONSE:** At this writing, Orange County has no documents responsive to this request.

Respectfully submitted,

  
Diane Curran

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September 17, 1999

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USNRC

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD<sup>99</sup> SEP 20 P3:11

In the Matter of )  
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CAROLINA POWER & LIGHT )  
(Shearon Harris Nuclear )  
Power Plant) )

OFFICE OF THE  
GENERAL COUNSEL  
ADJUDICATIONS

Docket No. 50-400 - OLA  
ASLBP No. 99-762-02-LA

**CERTIFICATE OF SERVICE**

I certify that on September 17, 1999, copies of the foregoing ORANGE COUNTY'S RESPONSES TO APPLICANT'S FIRST SET OF DOCUMENT PRODUCTION REQUESTS were served on the following by e-mail and/or first class mail as indicated below:

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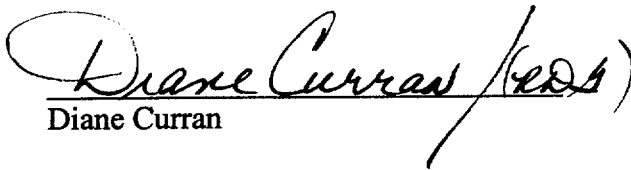
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