

**RAS 2208**

**RELATED CORRESPONDENCE**  
UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

September 20, 2000  
**DOCKETED 9/21/00**

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
Carolina Power & Light Company	)	Docket No. 50-400-OLA
	)	
(Shearon Harris Nuclear Power Plant)	)	ASLBP No. 99-762-02-LA
	)	

NRC STAFF'S FIRST SUPPLEMENTAL RESPONSE TO ORANGE COUNTY'S  
FIRST SET OF ENVIRONMENTAL DISCOVERY REQUESTS  
DIRECTED TO NRC STAFF

The Nuclear Regulatory Commission staff (Staff) hereby files its first supplemental response to Orange County's<sup>1</sup> First Set of Environmental Discovery Requests Directed to NRC Staff, filed August 21, 2000, responding to the document production requests contained therein.

As a preliminary matter, the Staff notes that it is not required to respond to BCOC's document production request absent prior findings by the Atomic Safety and Licensing Board (Board) that such response should be required, pursuant to 10 C.F.R. § 2.744 (d). The Staff further notes that 10 C.F.R. §§ 2.744 and 2.790, which govern the production of NRC records and documents, contemplate that most NRC documents will be available for inspection and copying in the public document room<sup>2</sup> and, if they have been withheld from the public document room pursuant to § 2.790, a request to the Executive Director for Operations for the production of such a document is required by § 2.744, which must state, among other things, why the requested record or document is relevant to the proceeding.

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<sup>1</sup> Hereinafter "BCOC."

<sup>2</sup> Please note that the PDR is being moved to room 0-1F21 at One White Flint North, 10555 Rockville Pike, North Bethesda, Maryland. The PDR will be closed on September 22, 2000 and September 25, 2000. It will reopen at OWFN on September 26, 2000.

Notwithstanding these regulations, without waiving any objections or privileges, and except as specified below, the Staff is now voluntarily providing responses to BCOC's document production requests. By responding to the instant discovery request, the Staff does not waive its right to require that the appropriate procedure be followed and that the required findings be made, pursuant to the Commission's regulations, before responding to any future discovery requests. Other than as specified below, only final NRC records and documents, under 10 C.F.R. § 2.790, will be identified or produced.

#### I. GENERAL OBJECTIONS

1. The Staff objects to Intervenor's discovery requests to the extent that they call for disclosure of litigation strategy and other material protected under 10 C.F.R. § 2.740 or other protection provided by law, attorney work product, privileged attorney-client materials, and other privileged materials, such as draft agency documents protected by executive privilege. The Staff will provide BCOC with a privilege log that identifies the documents withheld pursuant to this objection, which the Staff reserves the right to supplement.

2. The Staff objects to Intervenor's discovery requests to the extent that they request information or documents relating to licensees and/or entities other than Carolina Power & Light Company's Shearon Harris Nuclear Power Plant. Such discovery requests call for information which is irrelevant, immaterial, and not calculated to lead to the discovery of admissible evidence, and are overbroad and unduly burdensome.

3. The Staff objects to Intervenor's discovery requests to the extent that they call for irrelevant materials, not reasonably calculated to lead to the discovery of admissible evidence, are unreasonably cumulative, and are obtainable from another source that is more convenient, less burdensome, or less expensive.

4. The Staff objects to Intervenor's discovery requests to the extent that they seek discovery which is beyond the scope of the contention admitted by the Board in this proceeding.

**B. SPECIFIC DOCUMENT REQUESTS**

REQUEST NO. 1. All documents in your possession, custody or control that evaluate or otherwise discuss the probability of a degraded core reactor accident with containment failure or bypass at a nuclear power plant, including the Harris nuclear power plant.

**STAFF RESPONSE:**

The Staff objects to this request as being imprecise, overly broad and burdensome. To search for such documents in response to this request would require the expenditure of many hours of staff time and the identification of hundreds of documents. The Staff objects to this request as it would require the staff to engage in an excessive amount of research and compilation of data, much of which is publicly available to BCOC. The Staff further objects to the extent that the request seeks predecisional or privileged material or draft agency documents exempt from disclosure pursuant to 10 C.F.R. § 2.790. Without waiving those objections, the Staff identifies the following as responsive to this document request.

-Shearon Harris Nuclear Power Plant Individual Plant Examination (IPE) submittal dated August 20, 1993 (Accession No. 9309010155).

-NRC Staff's Evaluation of the Shearon Harris Nuclear Power Plant Individual Plant Examination dated January 26, 1996 (Accession No. 9601300315).

-Shearon Harris Nuclear Power Plant Individual Plant Examination for External Events (IPEEE) submittal dated June 30, 1995 (Accession No. 9507060075).

-NRC Staff's Evaluation of the Shearon Harris Nuclear Plant, Unit 1, Individual Plant Examination for External Events (IPEEE) dated January 14, 2000 (Accession No. ML003677142).

-Shearon Harris Nuclear Power Plant Final Safety Analysis Report

-NUREG-1038, "Safety Evaluation Report related to the operation of Shearon Harris Nuclear Power Plant, Units 1 and 2," dated November 1983. Supplement 1 dated June 1984; Supplement 2 dated June 1985; Supplement 3 dated May 1986; Supplement 4 dated October 1986.

-NUREG-1465, "Accident Source Terms for Light-Water Nuclear Power Plants", USNRC

- NUREG/CR-6331, "Atmospheric Relative Concentrations in Building Wakes", USNRC
  - NUREG-0956, "Reassessment of the Technical Bases for Estimating Source Terms", USNRC
  - NUREG/CR-5247, "RASCAL Version 2.2 User's Guide", USNRC
  - NUREG/CR-0200, "SCALE: A modular Code System for Performing Standardized Computer Analyses for Licensing Evaluation", USNRC
  - NUREG-1560, "Individual Plant Examination Program: Perspectives on Reactor Safety and Plant Performance," December 1997.
  - NUREG/CR-2723, D.R. Strip et.al., "Estimates of the Financial Consequences of Nuclear Power Plant Accidents," September 1982.
  - NUREG-1150, USNRC, "Severe Accident Risks: An Assessment for Five U.S. Nuclear Power Plants," December 1990.
  - NUREG/CR-4550, "Analysis of Core Damage Frequency," SAND86-2084, 1990.
  - NUREG/CR-4551, "Evaluation of Severe Accident Risks, SAND86-1309, 1993.
  - NUREG-1560, "Individual Plant Examination Program: Perspectives on Reactor Safety and Plant Performance," dated December 1997.
- NUREG-0575, "Final Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Power Reactor Fuel," Volumes 1-3, dated August 1979.

The Staff reserves the right to amend this response as discovery continues.

REQUEST NO. 2. All -documents in your possession, custody or control that evaluate or otherwise discuss the onsite or offsite consequences of a degraded core reactor accident with containment failure or bypass at a nuclear power plant, including the Harris nuclear power plant.

**STAFF RESPONSE:**

The Staff objects to this discovery request as being beyond the scope of the contention admitted to this proceeding and not designed to lead to discoverable information. Contention EC-6, as admitted to this proceeding relates solely to the probability of the occurrence of the seven step accident sequence specified on page 13 of the Licensing Board's Memorandum and Order of August 7, 2000. Therefore, any discovery regarding onsite consequences, to the extent that they

do not affect the probabilities, or offsite consequences of the sequence or any of the seven steps is irrelevant and not calculated to lead to admissible evidence. The Staff further objects to this request as being imprecise, overly broad and burdensome. To search for such documents in response to this request would require the expenditure of many hours of staff time and the identification of hundreds of documents. The Staff objects to this request as it would require the staff to engage in an excessive amount of research and compilation of data, much of which is publicly available to BCOC. The Staff further objects to the extent that the request seeks predecisional or privileged material or draft agency documents exempt from disclosure pursuant to 10 C.F.R. § 2.790. Without waiving those objections, the Staff states that documents relating to the onsite consequences of any of the steps of the accident sequence are listed in response to Document Request No. 1, above. Also:

Shearon Harris FSAR, Chapter 12.

-NUREG/CR-2858, "PAVAN: An Atmospheric Dispersion Program for Evaluating Design Basis Accidental Releases of Radioactive Materials from Nuclear Power Stations", USNRC

-NUREG/CR-6604, "RADTRAD: A Simplified Model for RADionuclide Transport and Removal And Dose Estimation", USNRC

-NUREG/CR-5106, "User's Guide for the TACT5 Computer Code", USNRC

-EPA 400-R-92-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," USEPA

EPA-520/1-88-020, "Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion," USEPA

-EPA-402-R-93-081, "External Exposure to Radionuclides in Air, Water, and Soil, Federal Guidance Report 12," USEPA

-NUREG/CR-3332, "Radiological Assessment: A Textbook on Environmental Dose Analysis, USNRC

The Staff reserves the right to amend this response as discovery continues.

REQUEST NO. 3. All documents in your possession, custody or control that evaluate or

otherwise discuss the probability of an accident involving exothermic reaction of fuel cladding in spent fuel pool(s), including the Harris nuclear power plant.

STAFF RESPONSE:

The Staff objects to this request as being imprecise, overly broad and burdensome. To search for such documents in response to this request would require the expenditure of many hours of staff time and the identification of hundreds of documents. The Staff objects to this request as it would require the staff to engage in an excessive amount of research and compilation of data, much of which is publicly available to BCOC. The Staff further objects to the extent that the request seeks predecisional or privileged material or draft agency documents exempt from disclosure pursuant to 10 C.F.R. § 2.790. Without waiving those objections, the Staff identifies the following as responsive to this document request.

-NUREG-1275, Operating Experience Feedback Report, Assessment of Spent Fuel Cooling, February 1997.

-NUREG-1353; Regulatory Analysis for the Resolution of Generic Issue 82, "Beyond Design Basis Accidents in Spent Fuel Pools," dated April 1989.

"Preliminary Draft Technical Study of Spent Fuel Pool Accidents for Decommissioning Plants," dated June 16, 1999. (Accession No. 9906220082)

-NRC Staff's "Draft Final Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants," dated February 2000 (Accession No. ML003683371).

NUREG/CR-4982, "Severe Accidents in Spent Fuel Pools in Support of Generic Issue 82."

NUREG/CR-4982, "Severe Accidents in Spent Fuel Pools in Support of Generic Issue 82." The Staff reserves the right to amend this answer as discovery continues.

The Staff reserves the right to amend this response as discovery continues.

REQUEST NO. 4. All documents in your possession, custody or control that evaluate or otherwise discuss the onsite or offsite consequences of an accident involving exothermic reaction of fuel cladding in spent fuel pool(s), including the Harris nuclear power plant.

STAFF RESPONSE:

The Staff objects to this discovery request as being beyond the scope of the contention admitted to this proceeding and not designed to lead to discoverable information. Contention EC-6, as admitted to this proceeding relates solely to the probability of the occurrence of the seven step accident sequence specified on page 13 of the Licensing Board's Memorandum and Order of August 7, 2000. Therefore, any discovery regarding the onsite or offsite consequences of an exothermic reaction in spent fuel pools is irrelevant and not calculated to lead to admissible evidence.

REQUEST NO. 5. All documents in your possession, custody or control that contain any information responsive to the question posed in paragraph 1 on page 17 of the Licensing Board's Memorandum and Order of August 7, 2000.

STAFF RESPONSE:

The Staff objects to the extent that the request seeks predecisional or privileged material or draft agency documents exempt from disclosure pursuant to 10 C.F.R. § 2.790. Without waiving this objection, the Staff states that no documents specifically responsive to the Licensing Board's question are available at this time.

The Staff reserves the right to amend this response as discovery continues.

REQUEST NO. 6. All documents in your possession, custody or control that contain any information responsive to the question posed in paragraph 2 on page 17 of the Licensing Board's Memorandum and Order of August 7, 2000.

STAFF RESPONSE:

The Staff objects to the extent that the request seeks predecisional or privileged material or draft agency documents exempt from disclosure pursuant to 10 C.F.R. § 2.790.

Without waiving this objection, the Staff states that no documents specifically responsive to the Licensing Board's question are available at this time.

The Staff reserves the right to amend this answer as discovery continues.

REQUEST NO. 7. All documents in your possession, custody or control that contain any information responsive to the question posed in paragraph 3 on page 17 of the Licensing Board's Memorandum and Order of August 7, 2000.

STAFF RESPONSE:

The Staff objects to this request on the same grounds as previously asserted in response to Specific Interrogatory No. 3, filed September 6, 2000.

REQUEST NO. 8. All documents (including experts' opinions, work papers, affidavits, and other materials used to render such opinion) supporting or otherwise relating to testimony or evidence that you intend to use in your Subpart K presentation and/or the hearing on Contention EC-6.

STAFF RESPONSE:

The Staff objects to this document request as seeking predecisional, trial preparation or privileged material or material exempted from disclosure by 10 C.F.R. §§ 2.744 and 2.790.

Without waiving this objection, the Staff states that, in addition to documents previously identified, the following documents may relate to or be utilized in support of the Subpart K submittal:

-NUREG 1038, "Safety Evaluation Report related to the operation of Shearon Harris Nuclear Power Plant, Units 1 and 2," dated November 1983. Supplement 1 dated June 1984; Supplement 2 dated June 1985; Supplement 3 dated May 1986; Supplement 4 dated October 1986.

-Environmental Report Operating Licensing Stage (EROL) - Shearon Harris Nuclear Power Plant Units 1, 2, 3 & 4, dated December 18, 1981 (Accession No. 8112220531); EROL Amendment 1, dated January 29, 1982 (Accession No. 8202040276); EROL Amendment 2, dated March 31, 1982 (Accession No. 8204080307); EROL Amendment 3, dated June 30, 1982 (Accession No. 8207080271).

- NUREG-1465, "Accident Source Terms for Light-Water Nuclear Power Plants", USNRC
- NUREG/CR-6331, "Atmospheric Relative Concentrations in Building Wakes", USNRC
- NUREG-0956, "Reassessment of the Technical Bases for Estimating Source Terms", USNRC
- NUREG/CR-5247, "RASCAL Version 2.2 User's Guide", USNRC
- NUREG/CR-2858, "PAVAN: An Atmospheric Dispersion Program for Evaluating Design Basis Accidental Releases of Radioactive Materials from Nuclear Power Stations", USNRC
- NUREG/CR-6604, "RADTRAD: A Simplified Model for RADionuclide Transport and Removal And Dose Estimation", USNRC
- NUREG/CR-5106, "User's Guide for the TACT5 Computer Code", USNRC
- EPA 400-R-92-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," USEPA
- EPA-520/1-88-020, "Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion," USEPA
- EPA-402-R-93-081, "External Exposure to Radionuclides in Air, Water, and Soil, Federal Guidance Report 12," USEPA
- NUREG/CR-3332, "Radiological Assessment: A Textbook on Environmental Dose Analysis, USNRC
- NUREG/CR-0200, "SCALE: A modular Code System for Performing Standardized Computer Analyses for Licensing Evaluation", USNRC
- Standard Review Plan, NUREG-0800, Chapter 9.2.5, "Ultimate Heat Sink," Chapter 9.1.3, "Spent Fuel Cooling and Cleanup System," and Chapter 9.1.2, "Spent Fuel Storage."
- Regulatory Guide 1.13, "Spent Fuel Storage Facility Design Basis."
- NRC Regulatory Guides, Series 1.
- NUREG-0800, Standard Review Plan
- Environmental Report Operating Licensing Stage (EROL) - Shearon Harris Nuclear Power Plant Units 1, 2, 3 & 4, dated December 18, 1981 (Accession No. 8112220531); EROL Amendment 1, dated January 29, 1982 (Accession No. 8202040276); EROL Amendment 2, dated March 31, 1982 (Accession No. 8204080307); EROL Amendment 3, dated June 30, 1982 (Accession No. 8207080271).
- NUREG/CR-0200, "SCALE: A modular Code System for Performing Standardized Computer Analyses for Licensing Evaluation", USNRC

-ACRS letter to Chairman Meserve dated April 13, 2000, subject: Draft Final Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants (Accession No. ML003705575).

-ACRS letter to Chairman Meserve dated June 20, 2000, subject: Proposed Resolution of Generic Issue - 173A, "Spent Fuel Storage Pool for Operating Facilities," (Accession No. ML003723289).

The Staff reserves the right to amend this answer as discovery continues.

Respectfully submitted,

Susan L. Uttal */RA/*  
Counsel for NRC Staff

Dated at Rockville, Maryland  
this 20th day of September 2000

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S FIRST SUPPLEMENTAL RESPONSE TO ORANGE COUNTY'S FIRST SET OF ENVIRONMENTAL DISCOVERY REQUESTS DIRECTED TO NRC STAFF" in the above-captioned proceeding have been served on the following through deposit in the NRC's internal mail system, or by deposit in the NRC's internal mail system, with copies by electronic mail, as indicated by an asterisk, or by deposit in U.S. Postal Service as indicated by double asterisk, with copies by electronic mail as indicated this 20<sup>TH</sup> day of September, 2000:

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