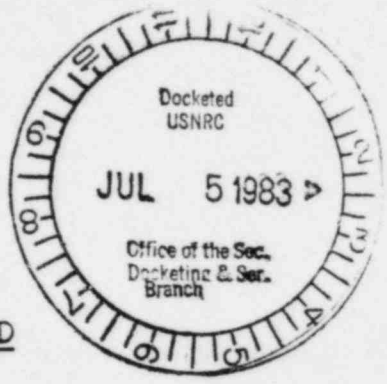
RELATED CORRESPONDENCE



UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD
Glenn O. Bright
Dr. James H. Carpenter
James L. Kelley, Chairman

In the Matter of CAROLINA POWER AND LIGHT CO. et al. (Shearon Harris Nuclear Power Plant, Units 1 and 2)	Dockets 50-400 OL 50-401 OL

REQUEST FOR PRODUCTION AND INTERROGATORIES TO APPLICANTS OF INTERVENOR CHANGE/ELP

Intervenor CHANGE/ELP hereby requests that Applicants answer the following interrogatories in accordance with the appropriate schedules established by Part 10 of the Code of the Federal Regulations, by order of the Board in this proceeding, or as may subsequently be agreed. These interrogatories are continuing in nature and should be supplemented when answers change or when Applicants discover new information which would go to answering them. CHANGE/ELP requests that Applicants answer each interrogatory separately and fully and in writing, and under oath and affirmation, and produce and permit inspection and copying of the original or best copy of all documents identified in the responses to said interrogatories or otherwise requested herein.

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GENERAL INTERROGATORIES

Responses to these general interrogatories shall be given for each contention, along with the responses to each specific interrogatory.

(1) State the name, present or last known address, and present or last known employer of each person known to Applicants to have first-hand knowledge on which the responses are based, for each of the contentions which are the subject of this set of interrogatories.

(2) Identify those facts concerning which each such person has first-hand knowledge.

(3) State the specific basis or facts which support each response. To the extent that Applicants rely solely upon documents for their response(s), please indicate the documents by their title, date, author, and location. Please identify also relevant page citations.

(4) State the name, present or last known address, and present or last known employer of each person who provided information upon which Applicants relied in answering each interrogatory herein.

(5) Identify all such information which was supplied by each such person and the specific interrogatory response in which such information is contained.

(6) State the name, address, title, employer, and educational and professional qualifications of each person Applicants intend to call as an expert witness or as a witness relating to any contention which is the subject of this set of interrogatories.

(7) Identify the contention(s) regarding which each person identified in interrogatory (6) is expected to testify, and the subject

matter as to which each such witness is expected to testify.

(8) Identify all documents in Applicants' possession, custody or control, including all relevent page citations, pertaining to the subject matter of, and upon which the Applicants relied, in formulating responses to, each contention which is the subject of this set of interrogatories.

(9) State the specific response to each contention or interrogatory which Applicants contend each document supports.

(10) Identify all documents in Applicants' possession, custody, or control, including all relevant page citations, upon which Applicants relied in answering each interrogatory herein.

(11) Identify all other sources of information, not identified in responses to General Interrogatories 5, 8, and 11 herein, which were used in answering each interrogatory herein.

(12) Identify all documents which Applicants intend to offer as exhibits during this proceeding to refute contentions which are the subject of this set of interrogatories.

DEFINITION

As used herein, the word "study" or "studies" shall not mean only documents titled as such, but it means such documents and other documents or activities involving critical examination and investigation of a subject, see New World Dictionary of the American Language, 2d College Edition, 1974.

SPECIFIC INTERROGATORIES

CHANGE contention 9 (transportation of spent fuel to SHNPP)

CHANGE contention 9 was accepted by the Board's order of September 22, 1982, at 23. Please answer the following interrogatories with respect to this contention, in accordance with the conditions heretofore set forth.

9-1. Do Applicants contest that CHANGE contention 9 is a properly accepted contention?

9-2. If the answer to 9-1 above is "Yes," please indicate Applicants' reason for such answer.

9-3.(a). In their "Answers to Conservation Council's Interrogatories to Applicants (First Set)," April 20, 1983, in response to Interrogatory No. 4-7(a)* Applicants indicated that "shipment of spent fuel from CP&L's Robinson and/or Brunswick Plant to the SHNPP site in the future is a possibility," Id. at 7. Do the Applicants have any definite plans to make such shipments?

(b). Have the Applicants prepared any contingency plans for making such shipments (by "contingency plan" a fairly complete plan requiring only minor adjustments and scheduling and NRC approval is meant)?

(c). If the answer to either 9-3(a) or 9-3(b) is "yes", please describe the routes and means of transportation selected.

(d). If the answer to either 9-3(a) or 9-3(b) is "yes", please produce such plans for inspection and/or copying.

(e). Have Applicants designated any of their employees, entered into contracts, or otherwise arranged for the preparation of such plans for the shipment of spent fuel from other nuclear plants to SHNPP?

(f). If the answer to 9-3(e) is "yes", please indicate the names of such persons or firms and produce any letters or confirmatory memoranda of such designation, contract, or arrangement.

9-4(a). Have Applicants conducted studies of spent fuel pool storage capacity at Brunswick and/or Robinson and the need for shipment of spent fuel from those plants offsite?

(b). If the answer to 9-4(a) is "yes", please produce such studies for inspection and/or copying.

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* "INTERROGATORY NO. 4-7(a). Do the Applicants plan on transporting radioactive waste or spent fuel from other reactors to the SHNPP site?"

(c) Please indicate projected dates developed in such studies when it would be reasonably likely that Applicants would need to ship such fuel offsite.

(d). Have Applicants conducted any studies, or contracted or otherwise arranged for such studies to be done, concerning the feasibility of constructing Independent Spent Fuel Storage Installations (ISFSI) at Brunswick and/or Robinson?

(e). If the answer to 9-4(e) is "yes", please indicate the results of such studies and produce them for inspection and copying.

(f) Have Applicants conducted any studies, or contracted or otherwise arranged for such studies to be done, concerning the feasibility of of reracking, fuel pool expansion, or other measures at the Brunswick and/or Robinson plants which would reduce or obviate the need to transport spent fuel to Shearon Harris?

(g) If the answer to 9-4(f) is "yes" please indicate the results of such studies and produce the studies for inspection and copying.

(h) Have third parties, such as the Electric Power Research Institute, the Nuclear Regulatory Commission, the United States Department of Transportation, or other organizations or individuals independent of Applicants, to Applicants' knowledge prepared any studies such as those desc ibed in 9-4(a), 9-4(d), or 9-4(f) above?

(i) If the answer to 9-4(h) is "yes" please indicate to the best of your knowledge document titles, accession numbers, authors and other pertinent information. To the extent that such documents are in Applicants' possession, custody or control, please produce them for inspection and/or copying.

(j) Do Applicants plan to constuct ISFSI, rerack, expand fuel pools, or otherwise undertake measures at Robinson and/or Brunswick to obviate or reduce the need to ship spent fuel to SHNPP?

(k) If the answer to 9-4(j) is "yes," please describe such plans with particularity and produce them for inspection and/Or copying.

9-5(a). Do Applicants contest the assertion that rail shipments of spent fuel from Brunswick to SHNPP will go through either Fayetteville or Raleigh?

(b). If the answer to 9-5(a) is "yes" please provide basis for your position.

(c). If the answer to 9-5(a) is "no" please provide details of any communications between Applicants and responsible emergency personnel in Fayetteville and Raleigh regarding emergency training, response plans, and other matters, including names

of local emergency personnel, employees of Applicant, dates of memoranda and/or letters, etc.

9-6(a). Please describe Applicants' "response teams," see "Answers to Conservation Council," supra at 10 (answer to interrogatory 4-10(b)), for transportation accidents.

(b). Please indicate training, equipment, staffing levels, notification procedures, additional duties, times of availability, proficiency testing procedures, state and federal qualification requirements and success at meeting such requirements, age, sex, physical parameters (height, weight), success in physical fitness examinations, geographic location (work and home) and other pertinent information for each such response team and for each member of such response team.

(c). Please describe communications links between such response teams and spent fuel carriers and between such response teams and appropriate state authorities and between such response teams and appropriate local authorities.

(d). Please indicate Applicants' best estimate of projected response time for an appropriate response team to be on site and fully equipped at an accident site along rail routes between the Brunswick plant and SHNPP.

(e), Please indicate how such estimate was arrived at.

(f). Please indicate the conditions under which Applicants would "deem it necessary and appropriate" ("Answers to Conservation Council," supra, answer to Interrogatory 4-10(b)) to dispatch such response teams.

9-7(a). Have Applicants, their contractors, or other persons known to Applicants prepared studies of the best route and/or transportation mode for shipment of spent fuel from Brusnwick and/or Robinson to SHNPP?

(b) If the answer to 9-7(a) is "yes", please identify who prepared such studies, the result of such studies, and produce such studies for inspection and/or copying.

CHANGE contention 44 (water level indicator)

CHANGE contention 44 was accepted by the Boards order of September 22, 1982, at 26. Please answer the following interrogatories with respect to this contention, in accordance with the conditions heretofore set forth.

44-1(a). At page 115 of NUREG-CR-2628, "Inadequate Core Cooling Measurement Using Differential Pressure for Reactor Vessel Level Measurement," it is stated that "There is an uncertainty in the measured level associated with the narrow range differential pressure measurement (the most sensitive) of about 6% or $\pm$ 2.5 ft." Do Applicants agree that this uncertainty applies to SHNPP?

44-1(b). If the asnwer to 44-1(a) is "no", please state the basis for your position.

(b)(1). Does your answer "no" indicate simply that the margin of uncertainty will be different at SHNPP? If so, what do Applicants believe the margin of uncertainty will be? What is the basis for this belief?

(b)(2). Is the basis of your answer "no" the result of modifications or alterations to the system described in NUREG/CR-2628? If so, please describe all such modifications and/or alterations (diagrams would be helpful).

(b)(3). Is your answer "no" based on a disggreement with the conclusion quoted from NUREG/CR-2628? If so, please specify the basis for your disagreement.

(c) If the answer to 44-1(a) is "yes", please indicate to what range the potential uncertainty will apply. In describing such range, please indicate with particularity:

(1) The range of uncertainty for SHNPP, measured both in feet (to the nearest tenth of a foot) and in percent.

(2) For the figure in percent, indicate precisely over what range the percentage applies: for example, from the top of the reactor vessel to the bottom, hot leg centerline to bottom of vessel, etc. For distances measured from the top or bottom of the reactor vessel, please indicate whether this is measured from the inside or the outside of the vessel. Please state your measurement in feet (to the nearest tenth of a foot).

(3) Please indicate the height of the reactor vessel, from the lowest point on the inside to the highest point on the inside, in feet (to the nearest tenth of a foot).

(4) Please indicate the height of the core, in feet (to the nearest tenth of a foot).

(5) Please indicate the distance between the bottom of the core and the bottom of the inside of the ractor vessel, in feet (to the nearest tenth of a foot).

(6) Please indicate Applicants' best estimate as to the average likely error (in feet, rounded to the nearest tenth of a foot) this uncertainty is likely to cause in water level readings during normal operation of SHNPP.

(7) Please indicate the basis for such estimate.

44-2. Assume a small-break LOCA in which the top of the core is within the range of uncertainty indicated above. Please answer the following questions:

(a) What other systems are available to provide operators with additional indication of the level of water inside the reactor vessel?

(b) What are the uncertainties associated with each of these other systems?

(c) To what extent do other systems rely exclusively on the RVLIS system during such accidents?

44-3(a). NUREG/CR-2628 at p. 18 describes generally the set up of the RVLIS system. Please provide more specific details, particularly diameter, composition, installation and finished interior appearance data for the capillary tubing. Describe how the capillary tubing will be attached to the reactor vessel, hot legs, etc. Describe the appearance of the capillary tube entrance as it would appear from the inside plane of the reactor vessel, hot leg, etc. Diagrams would be helpful.

(b). Have Applicants conducted, or has Westinghouse or its contractor(s) conducted, any studies concerning the effect of corrosion on the capillary tubing?

(c) Have Applicants or Westinghouse or their contractor(s) conducted any studies or analysis of the effects of corrosion on joints between the vessel, hot legs, etc. and the capillary tubing?

(d). Have Applicants, Westinghouse or their contractor(s) conducted any studies or analysis on blockage scenarios and the potential effect of blockage on the RVLIS system?

(e) If the answer to any of the preceding three questions (44-3(b)-(d)) is "yes," please indicate the results of such studies or analysis, the person(s) or organization(s) by whom they were performed, and produce doucmentary results for inspection or copying to the extent that such documents are in Applicants possession, custody, or control. To the extent that such documents are not in Applicants' possession, custody or control please indicate title, accession number(s), author, and other information necessary to locate same.

CONCLUSION

Intervenor requests that Applicants respond in writing and under oath to these interrogatories and produce such documents as are requested herein at a place and time mutually convenient to both parties.

Daniel F. Read
CHANGE
P.O. Box 524
Chapel Hill, NC 27514

June 30, 1983

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of CAROLINA POWER & LIGHT CO. et al., Shearon Harris Nuclear Plant, Units 1 & 2 } Dockets 50-400, 50-401

CERTIFICATE OF SERVICE

I hereby certify that copies of Request for Production & Interrogatories to Applicants were served this 30th day of June, 1983, by deposit in the U.S. Mail, first-class postage prepaid, upon all parties whose names appear below, except those whose names are marked with an asterisk, for whom service was accomplished by hand delivery (Runkle), UNC campus mail (Lotchin)

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