RELATED CORRESPONDENCE

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

CAROLINA POWER & LIGHT COMPANY AND NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY	)	
(Shearon Harris Nuclear Power Plant, Units 1 & 2)	)	Docket Nos. 50-400 OL 50-401 OL

APPLICANTS' RESPONSE TO RICHARD WILSON INTERROGATORIES

ANSWER TO GENERAL INTERROGATORY

INTERROGATORY NO. 1. For each of the answers you provide to the following interrogatories please give in footnote form each document (including all relevant page citations) you used in formulating the answers and you would use in refuting the contention during this proceeding. Please use the definition of document which you offered on page 3 of your January 31 interrogatories to me. Please produce all documents mentioned and permit copying and inspection by me or my agent. Please state the name, title, and employer of each person who contributes to the answers. Please identify explicitly any models or assumptions used in your answers. Please include all calculations in their entirety. Please footnote every fact in every answer.

ANSWER 1. Documents relied on by Applicants in answering these interrogatories are indicated within each response to the specific interrogatories on the contention. Applicants have not as of this time determined which, if any, documents they will use in refuting Wilson contentions. When and if Applicants identify such documents, Applicants will supplement this response in a timely manner.

The names, titles, and employers of those contributing to these answers to interrogatories are contained in Attachment A attached hereto.

All such models or assumptions used by Applicants in answering these interrogatories are indicated within each response to the specific interrogatories on the contentions.

Where calculations are requested and Applicants have previously made such calculations, such are provided. To the extent that Applicants would be required to perform new calculations, in answering these interrogatories, the same are objected to.

D503

All facts which respond to these interrogatories are contained within each response to the specific interrogatories on the contentions.

ANSWERS TO INTERROGATORIES ON CONTENTION 1(a)

INTERROGATORY NO. 1(a)-1. Please present your analysis of the environmental impact of chlorine transport in the vapor and aerosol effluent from the cooling tower in mid summer. If this analysis is for one unit, please explain how to convert this analysis to two units.

CP&L ANSWER 1(a)-1. Chlorine as (Cl_2), except possibly an immeasurable trace, will not exist in the cooling tower aerosol or vapor. For that reason, Applicants have concluded that there would be no environmental impact.

INTERROGATORY NO. 1(a)-2(a). If not contained in your answer to 1 above, please state

(1) the capacity factor you have used in your calculations,
(2) the number of minutes/day chlorine will be in the water,
(3) the concentration of chlorine in the water,
(4) the total amount of chlorine added per cycle of chlorination
(5) the total amount of chlorine released into the atmosphere per cycle
(6) the total amount of chlorine flowing into the main reservoir per cycle
(7) the model used to calculate the transportation and diffusion of chlorine in the cooling tower plume
(8) the concentrations of chlorine at ground level and 50 feet (tree top level) at distances of 1, 2, 5, 10, 20, and 50 miles from the source, assuming a strong, steady wind
(9) the models and analyses you rely on in determining the temporal and spatial dispersal of the cooling tower plume.

ANSWER 1(a)-2(a) (1) through (9). Not applicable.

INTERROGATORY NO. 1(a)-3. Please specify all situations which you project might require higher concentrations or longer durations of chlorination than "normal". What concentrations and durations might be needed. Please include measures to deal with the Asiatic clam in this list. What do you project the frequency and duration of these situations to be?

ANSWER 1(a)-3. The need for chlorination fluctuates with several natural factors that cannot be controlled. Among these are: temperature of the reservoir water, ambient air temperature and dew point (and therefore circulating water temperature), the abundance of nutrients available to organisms in the reservoir and the amount of sunlight. Also, chlorine may be required in greater amounts or for longer periods at initial plant startup and following shutdown periods. The system has been designed to

accomodate these fluctuations and therefore they are included in the "normal" range of operations even though they may require chlorination different from that required during most other time periods. The frequency and durations of greater than usual chlorination cannot be predicted. In any case, the limits established in the NPDES Permit will not be exceeded. Measures to control Asiatic clams, if necessary, will be within the range of "normal" chlorination practices within limits established in the NPDES permit.

INTERROGATORY NO. 1(a)-4. Please give a month-by-month estimate of the consumptive water loss through the cooling towers and a month-by-month estimate of the amount of chlorine added to the cooling water. Please specify the capacity factor and meteorologic conditions you assume. Please break down the total water loss into the amount of vapor and amount of aerosol. Give a detailed description of the aerosol particles which are formed. Please specify the month-by-month estimated water loss through evaporation from the reservoir.

ANSWER 1(a)-4. The month-by-month estimate of cooling tower evaporative losses is listed in ER Table 3.4.2-2 which also specifies the capacity factor and meteorological conditions assumed. In addition to the water loss in the form of vapor as described above, there is a small amount of cooling water loss by way of small droplets or aerosol carried by the rising air. As described in ER Section 3.4.2.5, this amounts to about 20 gpm for two units. Applicants do not have a detailed description of aerosol particles.

The month-by-month estimated water loss through natural evaporation from the reservoir is listed on ER Table 2.4.2-19A.

The month-by-month estimate of the amount of chlorine added to the cooling water is 18,648 lbs of chlorine per month.

INTERROGATORY NO. 1(a)-5. Please identify specifically the impact on the biosphere which will occur because of chlorine in cooling tower vapor. Please include the components of the biosphere which would be affected and the threshold concentration at which these components would be affected.

ANSWER 1(a)-5. Not applicable. See Answer 1(a)-1 above.

ANSWERS TO INTERROGATORIES ON CONTENTION 1(b)

INTERROGATORY NO. 1(b)-1. Please present your qualitative and quantitative analysis of the extent and impact of the dispersal of chlorinated organic compounds in vapor and aerosol form in cooling tower plume.

ANSWER 1(b)-1. Applicants have performed no such specific study; however, high dilution and dispersal, background concentrations from accepted uses and compliance with environmental regulation standards lead to the conclusion that the dispersal of chlorinated organics in vapor or aerosol will have no adverse impacts on the "biosphere."

INTERROGATORY NO. 1(b)-2. If not included in your answer to 1(b)-1 please specify the following items:

a) Give the type, quantity, and volatility of every compound which you project will be formed in the cooling towers. Give the total quantity of chemical released per hour in the cooling tower plume.

b) Present an analysis of the transport of these chemicals in the plume. Include in this analysis the rate of deposition of each chemical on the ground at 200 yard intervals from the plant site up to 50 miles for 2 meteorogical conditions - no winds and strong steady winds.

c) What is the fate of each of these chemicals once they reach the ground? By what processes are they degraded, modified or assimilated into living organisms? If they are assimilated by living organisms, are they concentrated in any part of those organisms or are they concentrated in food chains?

d) What is the known or suspected toxicity of each of these chemicals? (What organisms can be affected? What are the mechanisms of injury? (include direct toxicity, mutagenicity and behavioral effects) What doses are required to produce these effects?)

ANSWER 1(b)-2 a) through d). Not applicable.

INTERROGATORY NO. 1(b)-3. Excluding the documents cited in your response to 1(b)-1, please list all other documents you have used in your analysis of this problem.

ANSWER 1(b)-3. Not applicable.

INTERROGATORY NO. 1(b)-4. Please describe and demonstrate your intent and capability to monitor cooling water and drift for chloroganic compounds during the operation of the plant. Please include your analytical methodology and its sensitivity for all compounds in question.

ANSWER 1(b)-4. Applicants have no plans to monitor cooling water and drift for chloro-organic compounds during operation of the plant. However, chlorine residuals will be monitored to demonstrate compliance with the NPDES permit limitations.

INTERROGATORY NO. 1(b)-5. Please present the quantitative organic and inorganic chemical composition of the cooling water at the intake to the cooling towers. How do you project this composition will change with pumping from the Cape Fear River during a severe drought?

ANSWER 1(b)-5. Applicants began monitoring the cooling water intake area in January 1983. The results of the sampling are not yet available.

Pumping from the Cape Fear River would be restricted during a severe drought period in compliance with State minimum flow requirements. Therefore, the chemical composition of the plant intake water is not expected to be altered during dry periods aside from normal and natural fluctuations within the reservoir associated with climatological/meteorological changes.

INTERROGATORY NO. 1(b)-6. Describe the water quality control processes and the analyses which will be performed on cooling water which apply to organic compounds and heavy metals.

ANSWER 1(b)-6. Chlorine solution will be added to the Circulating Water System to control (eliminate) the growth of organics, and therefore residual chlorine will indicate the elimination of organics. A residual chlorine analyzer will be located downstream of the condenser to monitor residual chlorine. A residual of 0.5ppm will be maintained assuring total organic elimination. Applicants have not performed and do not plan to perform water quality control processes and analyses on cooling water regarding heavy metals.

INTERROGATORY NO. 1(b)-7. Please show, in graphic or tabular form, the temperature changes of cooling water as it passes through the tower.

ANSWER 1(b)-7. Such graphs are contained in Section 6.2 of "Natural Draft Cooling Tower Operating and Maintenance Instructions for Carolina Power & Light Company, Shearon Harris Nuclear Power Plant Unit 1" by Research-Cottrell, Inc. Hamon Cooling Tower Division, P.O. Box 1500, Somerville, New Jersey 08876. Said document will be made available to Dr. Wilson for his review at his request.

INTERROGATORY NO. 1(b)-8. Please identify documents providing schematic diagrams and descriptions of operation of the cooling towers.

ANSWER 1(b)-8. "Natural Draft Cooling Tower Operating and Maintenance Instructions for Carolina Power & ight Company, Shearon Harris Nuclear Power Plant Unit 1" by Research-Cottrell, Inc. Hamon Cooling Tower Division, P.O. Box 1500, Somerville, New Jersey 08876.

INTERROGATORY NO. 1(b)-9. The Environmental Protection Agency has recently required the operators of all steam electric plants to submit quantitative

analyses of cooling water for the so-called 129 "priority pollutants". Please identify the operating plants which are comparable in design to Shearon Harris or which you believe could be used as a predictor of the Shearon Harris Plant's performance. If available to you, please present the analyses done at these plants. Please present the analyses done at the Brunswick and Robinson plants.

ANSWER 1(b)-9. Objection: Applicants' counsel advised Dr. Wilson in a telephone call on 5/6/83 that Applicants find Interrogatory 1(b)-9 objectionable and sought to reach an accord with Dr. Wilson on this interrogatory. Dr. Wilson advised Applicants' counsel that he would reserve judgment on the appropriateness of the Interrogatory until he had seen Applicants' written explanation of their objection.

Applicants object to Interrogatory 1(b)-9 as overly broad and, therefore, beyond the scope of Wilson Contention 1(b). The majority of the 129 "priority pollutants" referenced in Environmental Protection Agency regulations are chemicals other than chlororganic compounds to which Wilson Contention 1(b) relates. The information sought is, therefore, beyond the scope of this contention.

ANSWERS TO INTERROGATORIES ON CONTENTION 1(c)

INTERROGATORY NO. 1(c)-1. Please present your analysis of the potential adverse environmental effects of using sulphuric acid or hydrogen peroxide to adjust pH of cooling water.

ANSWER 1(c)-1. Hydrogen peroxide is not used at Shearon Harris to adjust pH of the cooling water in the Circulating Water System. CP&L has not made a study of the effects of using sulfuric acid since none is expected to be discharged to the reservoir.

ANSWERS TO INTERROGATORIES ON CONTENTION 1(d)

INTERROGATORY NO. 1(d)-1. Please list all other chemicals that may be added to the cooling tower water for any purpose.

ANSWER 1(d)-1. Sodium Hydroxide (NaOH).

INTERROGATORY NO. 1(d)-2. Please specify the indications for the use of these chemicals, the concentrations at which they would be used, and the frequency and duration of use.

ANSWER 1(d)-2. Though normally not used, NaOH will be added to correct any overly acidic pH readings. Frequency and duration cannot be calculated.

INTERROGATORY NO. 1(d)-3. Are the following plants present in the main or auxillary [sic] reservoirs: alligator weed, hydrilla verticillata, or water hyacinth? Do you anticipate their presence during the lifetime of the plant? What measures for controlling these weeds are available? What is the efficacy, in your experience, of these measures? If not specified above what herbicides may be used for control of these weeds? What doses are needed for control? What frequency and duration of use do you anticipate will be required?

ANSWER 1(d)-3. Objection: Applicants' counsel advised Dr. Wilson in a telephone call on 5/6/83 that Applicants find Interrogatory 1(d)-3 objectionable and sought to reach an accord with Dr. Wilson on this interrogatory. Dr. Wilson advised Applicants' counsel that he would reserve judgment on the appropriateness of the Interrogatory until he had seen Applicants' written explanation of their objection.

Applicants object to Interrogatory 1(d) 3 because it seeks to address matters which are beyond the scope of Wilson Contention 1(d). Interrogatory 1(d)-3 asks whether certain plants are present in the main or auxillary [sic] reservoirs and certain other questions based upon the response to that question. Wilson Contention 1(d), however, has nothing to do with the reservoirs at the Harris plant. Rather, it relates to chemicals that Applicants' might add to water in the plant. ER Section 5.3.4 referenced in Wilson Contention 1(d) relates to systems or structures of the plant itself.

INTERROGATORY NO. 1(d)-4. For all chemicals mentioned in your answers to 1 (d).- 3 specify the following items:

a) Assuming the concentrations in your answer to 1(d)-2, give the total quantity of the chemical released per hour in the cooling tower plume.

b) Present an analysis of the transport of these chemicals in the plume. Include in this analysis the rate of deposition of each chemical on the ground at 200 yard intervals from the plant site up to 50 miles for 2 meteorological conditions - no winds and strong steady winds.

c) What is the fate of each of these chemicals once they reach the ground? By what processes are they degraded, modified or assimilated into living organism. If they are assimilated by living organisms, are they concentrated in any part of those organisms or are they concentrated in food chains?

d) What is the known or suspected toxicity of each of these chemicals? (What organisms can be affected? What are the mechanisms of injury? (Include direct toxicity, mutagenicity and behavioral effects) What doses are required to produce these effects?)

ANSWER 1(d)-4 a) through d). Not Applicable.

ANSWERS TO INTERROGATORIES ON CONTENTION 1(e)

INTERROGATORY NO. 1(e)-1. For a worst-case drought situation please specify the rate in cfs and gallons/day at which water from the Cape Fear River would be pumped into the Main Reservoir.

ANSWER 1(e)-1. As is described in ER Section 2.4.2.3.2.2.1 (page 2.4.2-13), the pumping rate is limited by the pumping capacity of 300 cfs (193.9 x 10^6 gallons/day) which will be the rate for a worst-case drought situation.

INTERROGATORY NO. 1(e)-2. For an average summer day please give the same information as in 1.

ANSWER 1(e)-2. The pumping rate would be 31.7 cfs (20.5 x 10^6 gallons/day) for an average summer day. This was obtained through a reservoir operation study using daily Buckhorn Creek steamflows recorded at the USGS station at Corinth, N.C. for the period from October 1973 through September 1980. The above rate represents the average pumping rate for the summer months of June, July and August in the seven-year period analyzed.

INTERROGATORY NO. 1(e)-3. For the situation described in 1 calculate the dilution of Cape Fear River water that would be achieved at the cooling tower intakes.

ANSWER 1(e)-3. No calculations of dilution of water pumped up from the Cape Fear River have been performed.

INTERROGATORY NO. 1(e)-4. Using the answers to 1 and 3 above please answer the following question. For a substance with concentration "x" in the Cape Fear River, what would be the concentration of that substance at the cooling tower inlet and in the cooling water?

ANSWER 1(e)-4. No concentration calculations for material pumped up from the Cape Fear River have been performed.

INTERROGATORY NO. 1(e)-5. In analyzing the possible environmental effects of using Cape Fear River water what toxic materials present in the river did you consider? What documents did you use in your analysis? Have you made any independent analysis? If so, please present that analysis. Please list any other studies of toxic materials in the river of which you are aware.

ANSWER 1(e)-5. No such study has been performed.

INTERROGATORY NO. 1(e)-6. Please describe and demonstrate your intent and capability to monitor on a continuing basis, any potentially toxic materials in the river. Please include the sources of information you would rely on in studying the upstream discharges and in monitoring the actual chemical composition of the Cape Fear River water.

ANSWER 1(e)-6. Applicants have been, and intend to continue, monitoring the water quality of the Cape Fear River in the vicinity of the planned makeup water pumping station.

INTERROGATORY NO. 1(e)-7. If you know of any toxic materials in Cape Fear River water, please present your analysis of the potential adverse effects on the biosphere of using this water as cooling water, addressing the potential for transport of the toxic materials in vapor or aerosol form in cooling tower plume.

ANSWER 1(e)-7. No such study has been performed.

INTERROGATORY NO. 1(e)-8(a). Identify the documents, including all relevant page citations, pertaining to the subject matter of, and upon which you relied in your cancellation of the Cape Fear River pumping station.

(b). State the name, present address, and employee of each consultant who produced documents identified in (a). Do the same for any agency or individual in CP&L.

(c). Identify all correspondence (briefly summarize untitled correspondence) produced by each of the persons listed in (b) or exchanged between CP&L and those persons. Include CP&L's correspondence to them.

(d). Identify the person by name and title on CP&L's technical staff who made the decision to cancel the pumping station. Identify each member, including title of position, on that person's staff.

(e). Identify all documents produced by the persons listed in (d) related to the cancellation of the pumping station. Briefly summarize untitled correspondence.

ANSWER 1(e)-8(a). Applicants have attempted to locate and assemble all correspondence requested in subsection (c) and other documents requested in subsection (e), if any, concerning deferral and construction of the Cape Fear River pumping station and will make those available to Dr. Wilson at his request.

(b). Correspondence was primarily between Ebasco and CP&L, and in a telephone conversation of 5/6/83 (see attorney certification attached) Dr. Wilson indicated he was not interested in the name and address of every employee of Ebasco or CP&L, as this interrogatory could be read to require, but rather only those "directly involved"; therefore, identities of those individuals directly involved in such are contained in said correspondence.

(c). See Answers 1(e)-8(a) and (b) above.

(d). The decision to defer construction of the pumping station was made by M. A. McDuffie, Senior Vice President, Engineering and Construction.

(e). See Answers 1(e)-8(a) and (b) above.

INTERROGATORY NO. 1(e)-9(a). Identify the documents, including all relevant page citations, pertaining to the subject matter of, and upon which you relied in reinstating the Cape Fear River pumping station.

(b). State the name, present address, and employer of each consultant who produced documents identified in (a). Do the same for any agency or individual in CP&L

(c). Identify all correspondence (briefly summarize untitled correspondence) produced by each of the persons listed in (b) or exchanged between CP&L and those persons. Include CP&L's correspondence to them.

(d). Identify all documents exchanged between CP&L and the NRC Staff relating to both the cancellation and the reinstatement of the pumping station.

(e). Identify the person, by name and title, on CP&L's technical staff who made the decision to reinstate the pumping station. Identify each member, including title of position, on that person's staff.

(f). Please state in detail the basis for this decision.

(g). Identify all documents produced by the persons listed in (e) related to the reinstatement of the pumping station. Briefly summarize untitled correspondence.

ANSWER 1(e)-9(a) through (d). See Answer 1(e)-8(a) and (b) above.

(e). The decision to construct the pumping station as currently described in the FSAR was made by M. A. McDuffie, Senior Vice President, Engineering and Construction.

(f). The decision to install a pumping station and maintain the reservoir elevation at 200 MSL and 300 CFS makeup from the Cape Fear River as currently described in the FSAR was based on a re-evaluation of the water quality in the reservoir. The limiting parameter was total dissolved solids (tds) which was established at a maximum of 200 ppm for acceptable quality. Under the most adverse condition evaluated with the projected blowdown and makeup being utilized with the second unit being in service, 200 ppm tds would not be reached.

(g). See Answer 1(e)-8(a) and (b) above.

ANSWERS TO INTERROGATORIES ON CONTENTION 1(f)

INTERROGATORY NO. 1(f)-1. Identify the documents, including all relevant page citations, pertaining to the subject matter of and upon which you relied in your analysis of the Buckhorn Creek Watershed and the flow in Buckhorn Creek. Include the rainfall data you used in establishing the equivalence of rainfall in Middle Creek and Buckhorn Creek.

ANSWER 1(f)-1. All information pertaining to the Buckhorn Creek Watershed and the flow in Buckhorn Creek is presented in FSAR subsection 2.4.1.2.1.1 on pages 2.4.1-2,

2.4.1-3 and 2.4.1-4. The estimated monthly average flows of Bucknorn Creek are shown on FSAR Table 2.4.1-1. FSAR Table 2.4.1-2 presents the comparison of monthly average flow between estimated and actual flow of Buckhorn Creek with their correlation analysis shown on FSAR Figure 2.4.1-5. No rainfall data was used in establishing the flow correlation between Middle Creek and Buckhorn Creek.

INTERROGATORY NO. 1(f)-2. State the name, present address, and employer of each consultant who produced documents identified in (1). Do the same for any agency or individual in CP&L.

ANSWER 1(f)-2. Dr. C. H. Zee of Ebasco Services, Inc., is responsible for material in 1(f)-1.

INTERROGATORY NO. 1(f)-3. Identify all correspondence (briefly summarize untitled correspondence) produced by each person or agency listed in (2) or exchanged between CP&L and them.

ANSWER 1(f)-3. In accordance with a phone conversation of May 9, 1983, between Hill Carrow and Dr. Wilson, it was agreed that only correspondence relevant to analysis of the Buckhorn Creek Watershed and the flow in Buckhorn Creek as contained in FSAR subsection 2.4.1.2.1.1 would be produced in response to this Interrogatory. Such correspondence will be made available at Dr. Wilson's request.

INTERROGATORY NO. 1(f)-4. Show on a map
a) the owners of all land in the Buckhorn Creek Watershed.
b) the present status of the land (i.e. forested or cleared)

ANSWER 1(f)-4(a). Owners of all land in the Buckhorn Creek Watershed are as indicated by public land registration records, including the tax maps of Wake and Chatham Counties, N. C., available in the respective county courthouses in Raleigh and Pittsboro, N. C.

(b). The present status of the land (i.e., forested or cleared) can be readily determined by direct observation or on public United States Geological Survey topographic maps for New Hill, Cokesbury, Fuquay-Varina and Apex, N. C.

This is the 10th day of May 1983.

Objections submitted by:

Hill Carrow

Hill Carrow
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602
(919) 836-6839

Attorneys for Applicants:

Thomas A. Baxter, Esquire
John H. O'Neill, Jr., Esquire
Pamela H. Anderson, Esquire
Shaw, Pittman, Potts & Trowbridge
1800 M. Street, N.W.
Washington, D. C. 20038
(202) 822-1000

Richard E. Jones, Esquire
Samantha Francis Flynn, Esquire
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602
(919) 836-6517

ATTACHMENT A

Dr. W. T. Hogarth — Manager - Environmental Technology Section
Shearon Harris Energy & Environmental Center
Rt. 1, Box 327
New Hill, North Carolina 27562
employed by CP&L

Dr. B. J. Ward — Principal Scientist - Biology Unit
Shearon Harris Energy & Environmental Center
Rt. 1, Box 327
New Hill, North Carolina 27562
employed by CP&L

Mr. Richard C. Yates — Project Scientist
Shearon Harris Energy & Environmental Center
Rt. 1, Box 327
New Hill, North Carolina 27562
employed by CP&L

Mr. David H. Schiller — Senior Scientist
Shearon Harris Energy & Environmental Center
Rt. 1, Box 327
New Hill, North Carolina 27562
employed by CP&L

Mr. Phillip B. Summers — Scientist
Shearon Harris Energy & Environmental Center
Rt. 1, Box 327
New Hill, North Carolina 27562
employed by CP&L

Mr. Leonard I. Loflin — Manager - Engineering, Harris Plant
Shearon Harris Nuclear Power Plant
Rt. 1, Box 101
New Hill, North Carolina 27562
employed by CP&L

Mr. David C. McCarthy — Senior Nuclear Engineer
Shearon Harris Nuclear Power Plant
Rt. 1, Box 101
New Hill, North Carolina 27562
employed by CP&L

Mr. Michael Farr — Principal Engineer
145 Technology Park
Norcross, Georgia 30092
employed by Envirosphere Company

Mr. William Yulinsky — Associate Engineer, Chemical Operations
2 World Trade Center
New York, NY 10048
employed by Ebasco

Dr. C. H. Zee — Principal Engineer, Civil Engineering and Consulting Department
2 World Trade Center
New York, NY 10048
employed by Ebasco

Dr. J. H. Huang — Principal Engineer, Civil Engineering Consulting Department
2 World Trade Center
New York, NY 10048
employed by Ebasco

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

CAROLINA POWER & LIGHT COMPANY AND NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY	Docket Nos.	50-400 OL
(Shearon Harris Nuclear Power Plant, Units 1 & 2)		50-401 OL

Certification by Counsel

I, Hill Carrow, Counsel for Applicants in this proceeding, certify that I have made the following efforts to resolve objections which Applicants have to certain of Dr. Wilson's interrogatories to Applicants dated March 29, 1983.

1. On Friday, May 6, 1983, I spoke to Dr. Wilson by phone concerning objections to his General Interrogatory, and Interrogatories 1(b)-9, 1(d)-3, 1(e)-8(c), and 1(e)-9(c), as follows:

a. Applicants found objectionable the portion of the General Interrogatory which requested all calculations be included in their entirety, to the extent that certain specific interrogatories on the contentions appear to require the Applicants to perform new calculations. For example, in Interrogatories 1(e) 3 and 1(e)-4, Applicants have answered that they have not performed the requested calculations. Dr. Wilson stated that he felt entitled to such information and Applicants should object if they contend otherwise.

b. Applicants objected to Interrogatory 1(b)-9 with regard to information sought concerning priority pollutants as irrelevant to, and beyond the scope of, Wilson Contention 1(b) which deals with chlororganic compounds. Dr. Wilson indicated Applicants should provide an explanation of such in their response.

c. Applicants objected to Interrogatory 1(d)-3 with regard to information sought concerning possible use of herbicides in the plant reservoirs as irrelevant to, and beyond the scope, of Wilson Contention 1(d) which deals with other chemicals to be added to plant water. Dr. Wilson indicated Applicants should provide an explanation of such in their response.

d. Applicants found objectionable Interrogatories 1(e)-8(b) & (c) and 1(e)-9(b) & (c) to the extent that they sought identities of all employees of CP&L and Ebasco and all their correspondence or other documents produced between CP&L and Ebasco. Dr. Wilson agreed that Applicants need only respond with employee identities and documents specifically relevant to deferral and construction of the Cape Fear River pumping station.

2. On Monday, May 9, 1983, I spoke to Dr. Wilson by phone concerning pplicants' objection to Interrogatory 1(f)-3 to the extent that interrogatory seeks all correspondence produced by Dr. Zee and/or between Dr. Zee and CP&L. Dr. Wilson agreed that Applicants need only respond with correspondence produced by Dr. Zee specifically relevant to analysis of the Buckhorn Creek Watershed and flow in Buckhorn Creek.

3. In light of Dr. Wilson's responses, Applicants have continued their objection to the General Interrogatory and have provided explanation for objections to Interrogatories 1(b)-9 and 1(d)-3. Only employee identities and documents relevant to the specific issues addressed in Interrogatories 1(e)-8, 1(e)-9, and 1(f)-3 will be made available in response to those Interrogatories.

Hill Carrow

Hill Carrow
Attorney
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Subscribed and sworn to
before me this 10th day
of May, 1983.

Debra L. Tharp

Notary Public

My Commission Expires: 9/28/85

DEBRA L. THARP
NOTARY
***
PUBLIC
WAKE COUNTY N.C.

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
CAROLINA POWER & LIGHT COMPANY AND NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY	)	Docket Nos. 50-400 OL 50-401 OL
	)	
	)	
(Shearon Harris Nuclear Power Plant, Units 1 and 2)	)	

AFFIDAVIT OF DR. WILLIAM T. HOGARTH

State of North Carolina)
)
County of Wake)

Dr. William T. Hogarth, being duly sworn according to law, deposes and says that he is Manager - Environmental Technology Section of Carolina Power & Light Company; that the answers to Interrogatories on Contentions 1(a), 1(b), 1(c) and 1(d) contained in "Applicants' Answers to Richard Wilson's Interrogatories to Applicant" are true and correct to the best of his information, knowledge and belief; and that the sources of his information are officers, employees, agents and contractors of Carolina Power & Light Company.

William T. Hogarth
Dr. William T. Hogarth

Sworn to and Subscribed before me,
this the 11th day of May, 1983.

Mary Lake George
Notary Public

My Commission Expires:

_____

Applicants were not able to attach hereto Affidavits as to the answers to Interrogatories on Contention 1(e) and (f), in that affiants were unavailable due to other conflicts. As soon as Affidavits are secured, they will be forwarded in a timely manner to the parties for attachment to Applicants' answers.

This the 10th day of May, 1983.

Hill Carrow

Hill Carrow
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602
Telephone: (919) 836-6839

CERTIFICATE OF SERVICE

I hereby certify that a copy of the Applicants' Answers to Richard Wilson's Interrogatories to Applicant has been served by deposit in the United States Mail, first class prepaid, addressed to the parties listed below this the 10th day of May, 1983.

James L. Kelley, Esquire
Atomic Safety and Licensing Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. Glenn O. Bright
Atomic Safety and Licensing Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dr. James H. Carpenter
Atomic Safety and Licensing Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Charles A. Barth, Esquire
Myron Karman, Esquire
Office of Executive Legal Director
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Docketing and Service Section
Office of the Secretary
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. Daniel F. Read, President
Chapel Hill Anti-Nuclear
Group Effort
Post Office Box 524
Chapel Hill, North Carolina 27514

Deborah Greenblatt, Esquire
1634 Crest Road
Raleigh, North Carolina 27606

Ruthanne G. Miller, Esquire
Atomic Safety and Licensing
Board Panel
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

John D. Runkle, Esquire
Conservation Council of North Carolina
307 Granville Road
Chapel Hill, North Carolina 27514

M. Travis Payne, Esquire
Edelstein and Payne
Post Office Box 12643
Raleigh, North Carolina 27605

Dr. Richard D. Wilson
729 Hunter Street
Apex, North Carolina 27502

Mr. Wells Eddleman
718-A Iredell Street
Durham, North Carolina 27705

Thomas A. Baxter, Esquire
John H. O'Neill, Jr.
Shaw, Pittman, Potts & Trowbridge
1800 M Street, N.W.
Washington, D. C. 20036

Dr. Phyllis Lotchin
108 Bridle Run
Chapel Hill, North Carolina 27514

Bradley W. Jones, Esquire
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street
Atlanta, Georgia 30303

Karen E. Long, Esquire
Staff Attorney
Public Staff
North Carolina Utilities Commission
Post Office Box 991
Raleigh, North Carolina 27601

Hill Carrow

Hill Carrow
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602
(919) 836-6839