

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

BEFORE ADMINISTRATIVE JUDGES

Glenn O. Bright  
Dr. James H. Carpenter  
James L. Kelley, Chairman

DOCKETED  
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SECRETARY  
OF THE BOARD  
OF NUCLEAR SERVICE  
BRANCH

3 March 1983

In the Matter of

CAROLINA POWER & LIGHT COMPANY  
AND NORTH CAROLINA MUNICIPAL POWER  
AGENCY NO. 3

Docket Nos. 50-400 OL  
50-401 OL

(Shearon Harris Nuclear Power Plant,  
Units 1 and 2)

RESPONSE TO APPLICANTS' INTERROGATORIES  
AND REQUEST FOR PRODUCTION OF DOCUMENTS

Answers To General Interrogatories

- 1 (a) I relied on no one.  
(b) See 1(a)  
(c) See 1(a)
- 2 (a) No one provided information. I relied on no one.  
(b) See 2(a)
- 3 (a) I have not selected any expert witnesses yet.  
(b) See 3(a)  
(c) See 3(a)
- 4 (a) I used only the FSAR and ER except the reference in response 1 (b) - 1 (a)  
(b) See 4(a)  
(c) See 4(a)
- 5 (a) (b) See 4(a)
- 6 (a) (b) None
- 7 (a) See 4(a)

DSQ3

Answers to Interrogatories on Specific Contentions

1(a) - 1(a) My contention is that the ER does not define the extent and impact of chlorine dispersal.

(b) See 1(a)

(c)(d) I have pointed out that the ER neglects to address a specific effluent and environmental impact of the operation of the Harris plant. I have made no further allegations and therefore at this point have done no analysis myself.

1(a) - 2(a) See 1A-1(c)(d) above

(b) See 2(a) above

(c) See 2(a) above

(d) See 1(a) - (c) (d) above

1(a) - 3(a) The NPDES permit is for wastewater discharges. My contention deals with vapor effluent.

(b) See 3(a)

(c) See 3(a)

1(a) - 4(a) See 1(a)-(c)(d) above

(b) See 4(a)

(c) See 4(a)

1(a) - 5 The text of the ER referred to Reference S.3-4-4 by Larson. There was no citation at the end of that section. My point is that this citation is deleted.

1(b) - 1(a) My contention is that chlororganic compounds dispersed in cooling towers vapor may be toxic to the surrounding biosphere.

(b) Chlororganic compounds are formed in chlorinated cooling water.

(Jolley, R.L., W.W. Pitts, F.G. Taylor, S.J. Hartmann and G.Jones, Jr. In: Water Chlorination: Enviromental Impact and Health Effects, Jolley, R.L., H. Corchev, D. H. Hamilton (eds). Proceeding of a conference October 30 - Nov. 4, 1977)

Chlororganic Compounds may be toxic directly, through behavioral effects, and through mutagenesis. (Joiley, R.L., G. Jones, W.W.Pitts, J.E. Thompson Chlorination of Organics in Cooling Waters and Process Effluents. In: Symposium proceedings cited above.)

(c) See I(a) - I(c)(d)

I(c) - I(a) My contention is that sulphuric acid and hydrogen peroxide may be toxic to the surrounding biosphere.

(b) See I(a) - I(c)(d)

(c) See (b)

(d) See (b)

I(d) - I(a) My contention is that "other chemicals" (words from ER) including biocides could be toxic to the biosphere.

(b) See I(a) - I(c)(d)

(c) See (b)

(d) See (b)

I(e)-1 ~~It~~ did not seem reasonable that one small creek could replace the water lost through cooling tower evaporation for 2-unit operation. I have done no numerical analysis.

I(e) - 2(a) It is widely known that the Cape Fear has many industrial waste inputs as well as municipal sewage inputs.

(b) I have not analyzed the composition of the river.

I(e) - 3(a) Yes

(b) See I(e) - 1 above. By "dispersed" I meant spread as vapor or aerosol in the cooling towers' plume.

I(e) - 4(a) I contend that the Cape Fear water, if dispersed, could be toxic to the biosphere.

(b) See I(a) - I(c)(d)

(c) See (b)

1(f) - 1(a) As I stated in the first Prehearing Conference Page 111 my concern is that routine operation of the plant might require more water than could be provided by Buckhorn Creek flow. The Reservoir Reanalysis has confirmed that concern. The point of my contention is that Cape Fear water will be used and that contention 1(e) must therefore be addressed.

(b) See 1(e) - 1 above

(c) See 1(a)

1(f) - 2(a) I contend that there may be times when Cape Fear River Water may be necessary to prevent unacceptably low water level in the main reservoir.

(b) See 1(e) - 1 above

1(f) - 3(a) No

(c) I clarified my concern in the First Prehearing Conference Page 111.

1(f) - 4(a) No

(c) I made no mention of the loss of service of cooling towers scenario.

1(f) - 5(a) No

(c) I made no mention of the Main Reservoir as a back up cooling reservoir.

1(f) - 6(a) No

(c) It is irrelevant to my contentions.

1(f) - 7(a) I contend that the method of calculation is not displayed and therefore cannot be evaluated.

1(f) - 8 There is no documentation of the comparison of rainfall in the Buckhorn Creek watershed and the Middle Creek watershed. The "synthesized" estimate of Buckhorn Creek flow (90 cfs), based on Middle Creek estimates, differed from the measured flow for the period 1973-1977 (79 cfs) by 12%.

1(f) - 9(a) Their equivalence has not been documented.

(b) I have not analyzed this question myself.

1(f) - 10 See above only.

I(f) - 11(a) See I(e)-1 and I(f)-1(a)

I(f) - 12 I do not know the frequency with which water will be used from  
Cape Fear river:

Response To Request For Production Of Documents

The document referred to in Response I(b) -1(a) is available at the  
North Carolina State University Library.

*RWilson*

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the matter of CAROLINA POWER & LIGHT CO. Et al. ) Dockets 50-400  
Shearon Harris Nuclear Power Plant, Units 1 and 2 ) and 50-401 O.L.

CERTIFICATE OF SERVICE

I hereby certify that copies of RESPONSE TO APPLICANTS' INTERROGATORIES  
AND REQUEST FOR PRODUCTION OF DOCUMENTS

HAVE Been served this 8 day of March 1983, by deposit in  
the US Mail, first-class postage prepaid, upon all parties whose names are  
listed below, except those whose names are marked with an asterisk, for  
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