

# XEROX

### Administrator

#### Document Name:

Printing Time: Copies Requested: Account: Virtual Printer: Printed For: G-B-003\_HNP\_Impoundment\_and\_Maintenance\_of\_Impounded\_Water\_Permit.pdf 09/14/11 08:19:14 1

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Administrator

Job # 3882

### Job Messages

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### Administrator

Document Name: G-B-003\_HNP\_Impoundment\_and\_Maintenance\_of\_Impounded\_Wa

%%[ ProductName: Xerox DocuColor 8000 Digital Press ]%% %%[Page: 1]%% %%[Page: 2]%% %%[Page: 3]%% %%[Page: 4]%% %%[Page: 5]%% %%[Page: 6]%% %%[Page: 7]%% %%[Page: 8]%% %%[Page: 9]%% %%[Page: 10]%% %%[Page: 11]%% %%[Page: 12]%% %%[Page: 13]%% %%[Page: 14]%% %%[Page: 15]%% %%[LastPage]%% Print Server Release: 61.80.73.86 Wed 14 Sep 2011 08:19:24 AM EDT Xerox DocuColor 8000 Digital Press Printer Type: Version Color: 3.0.66 dc8000\_slip-sheet Queue Name: docucolor8000 (SunOS 5.10 i386) Printer Name: 3882 Job Id: Copies Requested: 1 Total Pages RIP'd: 15 Stock: Name: Unspecified US Letter(8.5x11") (216.00 x 279.00) Size: Color: White 90.00 Weight: plain Type: Coating Type: None Output: Sides Imaged: 2 Sided Stapling/Finishing: No Finishing Image Quality: Print As Grayscale: Disabled Image Adjustments: Lightness: -100 ---Contrast: -100 ---Saturation: -100 ---0 ---- +100 Cyan: -100 ----0 ---- +100 Red Magenta: -100 ----Yellow: -100 ----0 ---- +100 0 ---- +100 Green 0 ---- +100 Blue 0 ---- +100 Options: Black Overprint: Disabled PostScript Overprint: Enabled Anti-aliasing: Disabled Disabled Trapping: Image Vector Trapping: Disabled User TRC: None Halftone: System Specified Input Color Setup RGB Color Space: Images Profile: s RGB Text and Graphics Profile: sRGB CMYK Color Space: Images Profile: SWOP Coated CMYK SWOP Coated CMYK Text and Graphics Profile: Gray Color Space: Images Profile: gamma-1.8 Text and Graphics Profile: DC8000 GRAY

## Job Messages

Output Color Setup Destination Profile: Rendering for Specific Data: Images: Text: Graphics: Pantone Processing: Automatic Image Enhancement: Interpolation Method: Dynamic LUT Generation:

PDL Settings: PostScript Resolution(dpi): Process Images at Half Resolution: XEROX DC8000

Relative Colorimetric Pure Saturation Enabled Disabled System Specified Enabled

600x600 Disabled

The online help contains information regarding the fields in this report.

#### PERMIT SUMMARY SHEET

AGENCY: N. C. Division of Health Services

PERMITS FOR: Impoundment and Maintenance of Impounded Water in the Main Reservoir and Auxiliary Reservoir

PERMIT NO.: 633 (each permit)

APPLICATION DATE: February 11, 1974

PERMIT ISSUE DATE: Main Reservoir - November 5, 1980 Auxiliary Reservoir - September 5, 1979

PERMIT EXPIRATION DATE: Permits remain in effect as long as the impounded water is maintained such that no menace is rendered to the public health.





IMPOUNDMENT NO. 633

		COUNTY	Wake	•
`	NORTH CAROLINA DEPARTMENT OF HUMA DIVISION OF HEALTH SERVI			
	Vector Control Branc Environmental Health Sect Raleigh, North Carolina 2	ion		• •
	PERMIT FOR IMPOUNDING AND MAINTENANCE O	F IMPOUNDED	WATER	_ *

#### Issued to:

NAME Carolina Power & Light Company (Shearon Harris Nuclear Power Plant - Main Reservoir ADDRESS P.O. Box 1551, 411 Fayetteville Street, Raleigh, NC 27602

The construction of the impounded water project described in your application dated <u>February 4</u>, 19 74, has been completed in accordance with the requirements of the Division of Health Services. Therefore, this permit is issued this <u>5th</u> day of <u>November</u>, 19 80.

The "Rules for the Control of Impounded Water" of the Division of Health Services shall be observed except provisions thereof as may be specifically waived in writing. This permit shall remain in force so long as the holders thereof maintain the impounded water in a condition which does not render it a menace to the public health.

> Hugh H. Tilson, M.D. Director, Division of Health Services

Verry C. Perkins, Head Vector Control Branch Environmental Health Section

cc: Local Health Department

DHS Form 1718 (Rev. 3/80) Vector Control Branch





POND NO. 633

COUNTY Wake

#### NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES DIVISION OF HEALTH SERVICES

#### Solid Waste & Vector Control Branch Sanitary Engineering Section Raleigh, North Carolina 27602

#### PERMIT FOR IMPOUNDING AND MAINTENANCE OF IMPOUNDED WATER

Issued to:

NAMECarolina Power & Light Company (Shearon Harris Nuclear Power Plant - Auxiliary<br/>Reservoir)ADDRESSP. O. Box 1551, Raleigh, NC 27602

The construction of the impounded water project described in your application dated <u>February 4</u>, 19 <u>74</u>, has been completed in accordance with the requirements of the Division of Health Services. Therefore, this permit is issued this <u>5th</u> day of <u>September</u>, 19 <u>79</u>.

The "Rules for the Control of Impounded Water" of the Division of Health Services shall be observed except provisions thereof as may be specifically waived in writing. This permit shall remain in force so long as the holders thereof maintain the impounded water in a condition which does not render it a menace to the public health.

> Hugh H. Tilson, M.D. Director, Division of Health Services

Jerry C. Perkins, flead Solid Waste & Vector Control Branch Sanitary Engineering Section

cc: Local Health Department

DHS Form 1718 (Rev. 3/77) Solid Waste & Vector Control Branch



#### STATE OF NORTH CAROLINA

DEPARTMENT OF HUMAN RESOURCES Division of Health Services P. O. Box 2091 Raleigh 27602

September 6, 1974

JACOB KOOMEN, M.D., M.P.H. DIRECTOR

Mr. J. A. Jones Executive Vice President Carolina Power & Light 'Co. P. O. Box 1551 Raleigh, N. C. 27602

Dear Mr. Jones:

Sanitarians from the Wake County and Chatham County Health Departments have checked the site of your proposed cooling lake for the Harris Plant and found no reason why you should not proceed with construction. You are therefore granted permission to proceed with construction when you wish. Upon completion of the lake and before it is impounded, we should be notified so that a final inspection can be made and if requirements have been met, an "Impounding Permit" will be issued.

This lake is recorded by us as Pond No. 633 -- Wake County.

Sincerely,

D. F. Ashton, Entomologist Solid Waste & Vector Control Branch Sanitary Engineering Section

DFA/ct

.....

JAMES E. HOLSHOUSER, JR. Governor DAVID T. FLAHERTY

SECRETARY

(Reprinted from the Regulations and Disease Control Measures of the North Carolina State Board of Health Governing the Control of Communicable Diseases)

#### REGULATION ON CONTROL OF IMPOUNDED WATER

**REGULATION 14.** The following control measures shall be required for water impounded or to be impounded:

1. For the purpose of this regulation certain words and terms used herein are defined as follows:

The term *impounded water* means: Any body of water formed by the construction or excavation of a basin or the obstruction of stream flow in such a manner as to cause the collection of a body of water which would not have formed under natural conditions. Such impounded water of less than one-fourth acre of water surface is not included in this definition.

The word *person* means: Any individual, firm, corporation, or governmental agency owning or otherwise directly responsible for the impounded area or area to be impounded; or the agent, representative or lessee of such individual, firm, corporation, or governmental agency.

The term malaria-carrying mosquitoes means: The Anopheles quadrimaculatus or any other species of mosquitoes proven to be vectors of malaria.

The word *flotage* means: Any collection of small material on the surface of impounded water, such as leaves, chips, bark, small twigs, grasses, and the like, which may provide breeding conditions favorable to malaria-carrying mosquitoes.

The word *drift* means: Any large material on the surface of impounded water, such as logs, brush, and the like which may collect and hold flotage or otherwise produce conditions favorable to the production of malaria-carrying mosquitoes.

The term *control measures* means: Any measures approved by the State Board of Health which are used in the prevention or control of malaria. These measures include fluctuation of the water level, removal of flotage, removal of drift, removal of aquatic or other growth, application of larvicides, screening, or any other measures effective in the control of malaria.

2. Any person proposing to impound water, raise the level of existing impounded water, or reimpound water in areas where previous impoundage has been discontinued for three or more months, shall, prior to the institution of any construction or reimpoundment activities, make written application to the State Board of Health and receive therefrom a written permit for impoundage construction or reimpoundment. Such application shall be made on the approved form furnished by the State Board of Health and in the name of the person making application, and shall be accompanied by a description of the proposed project, its purpose, and its exact location; also by an accurate plat of the area to be affected, showing particularly the maximum and minimum water levels of the proposed impounded water, and other information required by the State Board of Health.

3. Such permit shall be issued by the State Board of Health when compliance with the following requirements has been assured.

(a) The person responsible for construction shall carry out such measures as may be prescribed by the State Board of Health for preventing the introduction of malaria through infected employees coming from without the reservoir area or its environs.

(b) In the area to be occupied by the impounded water, all brush, trees, undergrowth, logs, stumps, and other objects, which if not removed would float or collect flotage on the surface of the impounded water; and all of the above material that is lying on the ground or remaining in the original or new position, which would probably cause collection of flotage, and thus constitute conditions favorable to the production of malaria-carrying mosquitoes, shall be removed, burned or otherwise satisfactorily disposed of, prior to the impounding of the water.

(c) In the area to be occupied by the impounded water all trees and other growth which would pierce the surface at minimum low water level shall be cut off at least one foot below such water level, to prevent the collection of drift or flotage.

(d) The shoreline of the impounded water from minimum low water level to a line ten feet horizontally outward from normal high water level, shall be cleared of all brush, trees, undergrowth and any material which may cause the collection of drift or flotage.

(e) Any area which will be covered by impounded water at the time of maximum water level and in which water will be retained at lower stages of the impounded water, thus forming a separate pool, shall be connected with the main body of the impounded water by a ditch or culvert which will permit effective drainage or access by boat.

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(f) In the designing and construction of the impoundage project, flashboards or other means shall be provided for controlled fluctuation of the water level at any season of the year in the manner and amount as specified by the North Carolina State Board of Health.

(g) In the designing and construction of the impoundage project, bottom drains, or other means, shall be provided which will permit removal of the impounded water.

4. The State Board of Health shall make inspections of the impoundage project from time to time and shall approve such portions of the work required under Section 3 which have been satisfactorily completed.

5. Any person holding a permit for construction, prior to the actual impounding of water, shall give written notice to the State Board of Health and certify that all requirements for said construction have been fully performed. The State Board of Health shall then issue a permit for the impounding and maintenance of impounded water if it finds that such construction has been completed in accordance with plans approved by the State Board of Health, provided that any filling of the reservoir shall not occur during the malaria-carrying mosquito-breeding season, namely, April to September, inclusive, unless otherwise authorized in writing by the State Board of Health.

6. The person responsible for the maintenance of impounded water shall from time to time furnish the State Board of Health with reports of operation, maintenance, or condition of the impounded water, as may be specified by the State Board of Health. Such records as contain the information required, as aforesaid, shall be open to inspection by the State Board of Health.

7. The State Board of Health from time to time shall make such inspections of the impounded water as are deemed advisable; and any conditions found which are, or may be, conducive to the production of malaria-carrying mosquitoes, or likely to cause an increase in malaria, shall be corrected by the person holding the permit for impounding and maintenance of impounded water in whatever manner is found necessary by the State Board of Health for the preservation of public health.

8. Where any owner or lessee of lands shall permit the continuance of any impounded water existing upon said lands at the time these regulations become effective and where it is discovered that malaria-carrying mosquitoes are breeding in such impounded water or where it is further discovered, by blood slide tests made by state, county, or municipal health authorities, that one or more persons residing within one mile of such impounded water has malaria, such owner or lessee shall, within thirty days after the receipt of written notice by any state, county, or municipal health authorities that such conditions exist, take effective measures prescribed by or satisfactory to the North Carolina State Board of Health for the prevention of the breeding of malariacarrying mosquitoes in the impounded water or shall remove the impounded water by drainage or filling. Such measures shall include the removal of all drift and flotage and vegetation that pierces the water surface, the application of larvicides, the fluctuation of the water level, the reduction in the area of water surface, and the application of any other control measures currently recognized as being effective by the North Carolina State Board of Health.

9. It shall be the duty of all local health directors to enforce the provisions of this regulation. Authorized representatives of the North Carolina State Board of Health and local health departments shall have authority at all times to enter, for the purpose of inspection, the premises upon which water has been impounded or upon which it is proposed to impound water. Any person who shall hinder or prevent any authorized representative of the North Carolina State Board of Health or a local health department in the performance of his duty in connection with this regulation shall be guilty of a violation thereof. February 11, 1974

N. C. State Board of Health Sanitary Engineering Division P. O. Box 2091 Raleigh, North Carolina 27602

Attention: Mr. S. H. Usry

SHEARON HARRIS NUCLEAR POHER PLANT COOLING LAKE AND AUTILIARY POND CONSTRUCTION PUNIT

Gentlemen:

We submitted an application on February 4, 1974 for the construction of the cooling lake and auxiliary pond at our proposed Shearon Harris Nuclear Power Plant in Wake County. However, our application described two 24-inch drains at the base of the dam. These drains were included in our original plans but have since been replaced with an uncontrolled spillway.

We are submitting to you three copies of the corrected application and apologize for the error.

If we can be of any further assistance, please let us know.

Yours very truly.

5. A. Jones Executive Vice President

JAJ:dy Enclosure

bcc: Messrs. W. Brian Howell W. E. Kincaid M. A. McDuffie D. V. Menscer/P. W. Howe J. M. Sell E. E. Utley

T. H. Wylie

#### APPLICATION IS HEREBY MADE FOR A PERMIT

To be submitted in triplicate to:

North Carolina State Board of Health Sanitary Engineering Division Raleigh, North Carolina

(a) To impound water x

(b) To raise the level of an existing pond\_\_\_\_\_

1. County Wake Township

2.	Location	in	relation	to	two	or	more	well-known	landmarks:
----	----------	----	----------	----	-----	----	------	------------	------------

On Buckhorn Creek, Chatham County, near its confluence with the Cape Fear

River; in the vicinity of Buckhorn Dam on the Cape Fear River about two

miles south of Corinth, North Carolina.

3. Owner of pond Carolina Power & Light Company

4. Address of owner P. O. Box 1551, Raleigh, North Carolina 27602

5. Purpose of the project Cooling lake and auxiliary pond

 Approximate number of persons living within one mile of the proposed reservoir or pond 200

7. Approximate area to be covered by reservoir 4100 acres, 325 acres

 Diameter of drain at bottom of dam None. The lake will have an uncontrolled spillway at elevation 220 ft.
Description of device for fluctuating water level <u>Lake level will</u>

fluctuate as a result of losses from evaporation, seepage, and discharge through

the	2 1ow	level	release	facil	ities,	and as	a res	ult of	make-u	p supp	lied b	y 300	cfs
cap	pacity	pumps	S.					· • · · · ·					
10.	Will	suff	icient	money	be ava	ailable	e for	maint	aining	pond	after	im-	
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	poun	dage	so that	it wi	ll not	t produ	uce mo	souit	oes?	Ye	s	-	
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11. Date when it is desired to start construction January, 1974

12. Date when it is desired to impound water Fall. 1975

In making this application, I agree to comply with the regulation governing impounded water and so maintain the pond that it will not produce mosquitoes and thereby become a nuisance dangerous to the public health. Place <u>Raleigh, N. C.</u> Date <u>Jeb</u>, 11, 1974

Applicant's signature



### STATE OF NORTH CAROLINA

DEPARTMENT OF HUMAN RESOURCES

JACOB KOOMEN, M.D., M.P.H. Director

GOVERHOR DAVID T. FLAMERTY SECRETARY

JAMES E. HOLSHOUSER, JR.

**Division of Health Services** 

P. O. Box 2091

Raleigh 27602

February 11, 1974

Mr. J. A. Jones Executive Vice President Carolina Power & Light Company 336 Fayetteville Street P. O. Box 1551 Raleigh, N. C. 27602

Re:	Pond No.	747
	County	Chatham

Dear Sir:

Acknowledgment is made of the receipt of your application for a permit to build a pond. A copy of this application has been sent to your local health department at Siler City with a request that someone from that office contact you, make an inspection of the site, and give you a Construction Permit if the site is found to be satisfactory. This Construction Permit merely authorizes you to build a pond at the site described in your application but does not give you authority to impound water.

After the pond has been constructed in accordance with the requirements of your local health department, we will issue you a "Permit for Impounding and Maintenance of Impounded Water" upon the receipt of a recommendation from your local health department to do so.

Attached for your files is a copy of the application submitted by you and a copy of Regulation 14 of the "Regulations and Disease Control Measures of the North Carolina State Board of Health (Division of Health Services) Governing the Control of Communicable Diseases."

Very truly yours,

ichney A. Clary.

Sidney H. Usry, Head Solid Waste & Vector Control Branch Sanitary Engineering Section

Attachments cc: Local Health Department

DHS Form 1722 (10/73) Solid Waste & Vector Control Branch

Mr. Meuscer



#### STATE OF NORTH CAROLINA

DEPARTMENT OF HUMAN RESOURCES

JAMES E. HOLSHOUSER, JR. Governor David T. Flaherty Secretary

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JACOB KOOMEN, M.D., M.P.H. Director

Division of Health Services

P. O. Box 2091

February 11, 1974

Mr. J. A. Jones Executive Vice President Carolina Power & Light Company 336 Fayetteville Street P. O. Box 1551 Raleigh, N. C. 27602

Re:	Pond No.	633
	County	Wake

Raleigh 27602

Dear Sir:

Acknowledgment is made of the receipt of your application for a permit to build a pond. A copy of this application has been sent to your local health department at <u>Raleigh</u> with a request that someone from that office contact you, make an inspection of the site, and give you a Construction Permit if the site is found to be satisfactory. This Construction Permit merely authorizes you to build a pond at the site described in your application but does not give you authority to impound water.

After the pond has been constructed in accordance with the requirements of your local health department, we will issue you a "Permit for Impounding and Maintenance of Impounded Water" upon the receipt of a recommendation from your local health department to do so.

Attached for your files is a copy of the application submitted by you and a copy of Regulation 14 of the "Regulations and Disease Control Measures of the North Carolina State Board of Health (Division of Health Services) Governing the Control of Communicable Diseases."

Very truly yours,

Sectney A. Clay.

Sidney H. Usry, Head Solid Waste & Vector Control Branch Sanitary Engineering Section

Attachments cc: Local Health Department

DHS Form 1722 (10/73) 5 Solid Waste & Vector Control Branch February 4, 1974

N. C. State Seard of Health Semitary Engineering Division P. C. Sox 2091 Leleigh, Worth Caroline 27602

Attention: Mr. S. E. Cary

#### SUFARON HATEIS LUCLEAR POWER PLANT COOLING LAKE AND AUXILIARY FORD CONSTRUCTION PERMIT

#### Gentleman:

Enclosed in triplicate is our revised application and specifications for a permit to construct a cooling lake and auxiliary pond at our proposed Sheares Harris Suchear Fower Flant in the vicinity of New Hill, North Caroline. Also enclosed are figures showing the project location and the lake area configuration. This subsisted is to replace an earlier application for a 10,000 acru laks. Flans for the original 10,000 acre lake have been abandoned and replaced by a 4,100 acre lake.

The plane will consist of four 900 MF nuclear units, one ocheculed to begin generation is each of the years 1979 through 1982. We plan to construct a 4100 acre cooling lake and a 325 acre suxiliary cooling pond for emergency cooling purposes.

The proposed cooling lake and sumiliary pool will be impounded by dans on inchaon crack. The normal vater level of the 4100 acre cooling lake will be at elevation 220 (msl). Approximate minimum vater elevation will be at 205 (msl). The emergency cooling pood will be held at a normal elevation of approximately 250 fact (msl).

The water level in these reservoirs will fluctuate as a result of losses due to eveporation and scepage, and as a result of natural inflow and nature supplied from the Cape Fear to the cooling lake.

Details of the clearing operation will be done in accordance with the conditions stated in the specifications. All necessary precautions will be taken to prevent interial from the clearing operation from moving onto the vater surface; and the impounded veter surface will be bept clean of all floating material. Should any questions arise during the review of the application. plasses contact us.

Touge very truly, í e

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Executive Vice President

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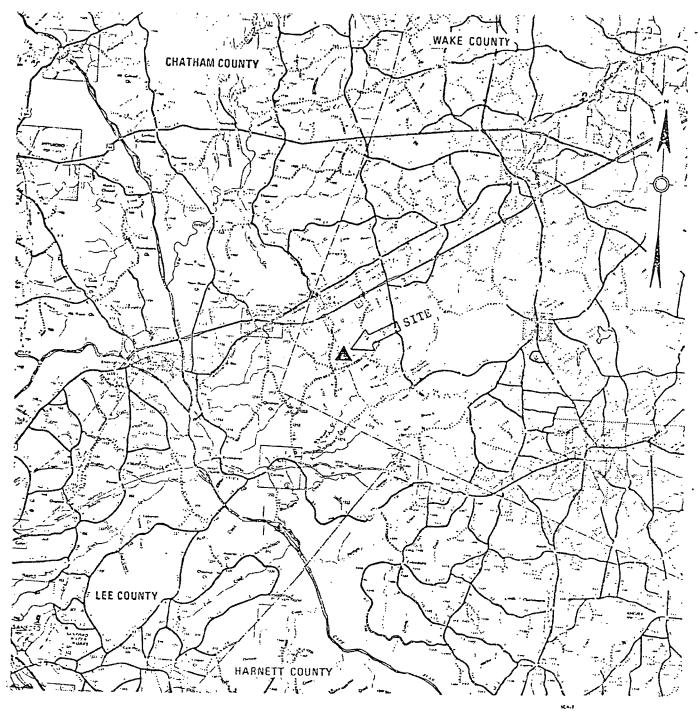
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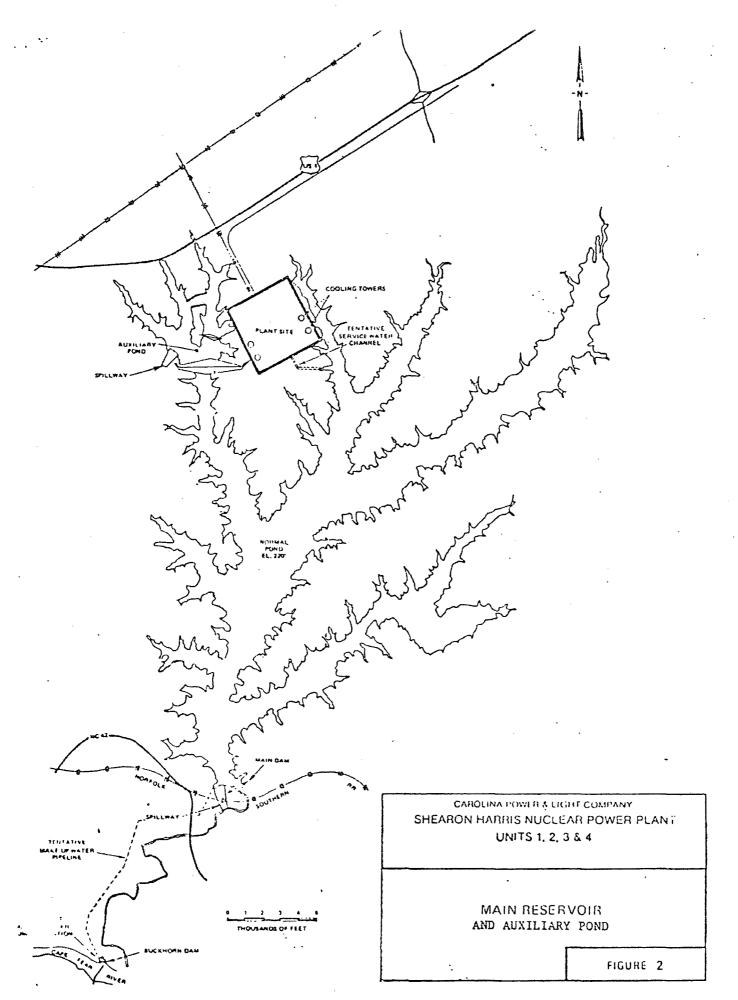
be: Messrs. W. Brian Howell W. B. Eincaid M. A. McDuffle D. T. Menscer/F. V. Fowe J. H. Sell B. E. Utley T. Wylis

To	be submitted in triplicate to:
·	N. C. Department of Human Resources Division of Health Services Sanitary Engineering Section Solid Waste & Vector Control Branch Raleigh, North Carolina 27602
	(a) To impound water X
	(b) To raise the level of an existing pond
1.	County <u>Wake</u> Township
2.	Location in relation to two or more well-known landmarks:
	On Buckhorn Creek, Chatham County, near its confluence with the Cape Fear
	River; in the vicinity of Buckhorn Dam on the Cape Fear River about two miles
	south of Corinth, North Carolina.
3.	Owner of pond <u>Caroline Power &amp; Light Company</u>
4.	Address of owner P.O. Box 1551, Raleigh, North Carolina 27602
5.	Purpose of the project Cooling lake and auxilary pond
б.	Approximate number of persons living within one mile of the proposed reservoir or pond
7.	Approximate area to be covered by reservoirs 4100 acres, 325 acres
8.	Diameter of drain at bottom of dan <u>two 24-inch pipes</u>
9.	Description of device for fluctuating water level <u>Lake level will</u>
	fluctuate as a result of losses from evaporation, seepage, and discharge through
	the low level release facilities, and as a result of make-up supplied by 300 cfs
10.	capacity pumps. Will sufficient money be available for maintaining pond after impoundage so that
	it will not produce mosquitoes? Yes
11.	Date when it is desired to start construction <u>January</u> , 1974
	Date when it is desired to impound water <u>Fall 1975</u>
wate	making this application, I agree to comply with the regulation governing impounded er and so maintain the pond that it will not produce mosquitoes and thereby become disance dangerous to the public health.
Plac	ce Raleigh, N.C. Date February 4, 1974 Our
	Applicant's signature Arthur



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CAROLINA POWER & LIGHT COMPANY SHEARON HARRIS NUCLEAR POWER PLANT UNITS 1, 2, 3 & 4
COUNTY MAP OF AREA SURROUNDING THE SITE
FIGURE 1



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