

JUL 13 1983

Docket Nos. 50-413  
and 50-414

DISTRIBUTION  
Dockets  
EHEB Rdg  
WVJohnston  
TNovak  
RBallard  
EAdensam  
KJabbour  
JLehr  
CBillups  
RBSamworth  
NRC PDR  
LPDR

Mr. Lawrence E. Turner  
Impact Analysis and Standards Section  
Water Quality Assessment and Enforcement Division  
Bureau of Water Pollution Control  
South Carolina Department of Health and  
Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

Dear Mr. Turner:

Enclosed for your information is a copy of recent correspondence between the NRC and the U.S. Department of the Interior relative to the potential biotic impacts associated with operation of the Catawba Nuclear Station intake structure, discharge structure and the compliance of the station thermal discharges with South Carolina water quality standards.

Copies of this correspondence have been placed in the NRC docket files for the Catawba Nuclear Station Operating License Application. If you have any further questions regarding this correspondence, please contact the Catawba project manager, Kahtan Jabbour, at (301) 492-7800.

Sincerely,

15/  
Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

Attachments:

1. March 9, 1983 Ltr fm B. Blanchard
2. July 13, 1983 ltr fm E. Adensam

cc: See attached list

8307280099 830713  
PDR ADOCK 05000413  
D PDR

OFFICE	DE:EHEB	DE:EHEB	DE:EHEB	DL:LB4	DL:LB4		
SURNAME	JCLehr:ws	RBSamworth	RLBallard	KJabbour	EAdensam		
DATE	6/28/83	6/28/83	6/18/83	7/13/83	7/13/83		

DISTRIBUTION  
Dockets  
EHEB Rdg  
WVJohnston  
TNovak  
RLBallard  
EAdensam  
KJabbour  
JLehr  
CBillups

Docket Nos. 50-413  
and 50-414

Mr. Lawrence E. Turner  
Impact Analysis and Standards Section  
Water Quality Assessment and Enforcement Division  
Bureau of Water Pollution Control  
South Carolina Department of Health and  
Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

Dear Mr. Turner:

Enclosed for your information is a copy of recent correspondence between the NRC and the U.S. Department of the Interior relative to the potential biotic impacts associated with operation of the Catawba Nuclear Station intake structure, discharge structure and the compliance of the station thermal discharges with South Carolina water quality standards.

Copies of this correspondence have been placed in the NRC docket files for the Catawba Nuclear Station Operating License Application. If you have any further questions regarding this correspondence, please contact me at 301-492-7832 or Dr. Charles Billups (301-492-8118) of the staff directly.

Sincerely,

Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

Attachments:

1. March 3, 1983 Ltr fm B. Blanchard
2. May , 1983 ltr fm E. Adensam

OFFICE	DE:EHEB	DE:EHEB	DE:EHEB	DL:LB4	DL:LB4	
SURNAME	JLehr:ws	RBSamworth	RLBallard	KJabbour	EAdensam	
DATE	4/28/83	4/29/83	4/29/83	/ /83	/ /83	

CATAWBA

Mr. H. B. Tucker, Vice President  
Nuclear Production Dept.  
Duke Power Company  
422 South Church Street  
Charlotte, North Carolina 28242

cc: William L. Porter, Esq.  
Duke Power Company  
P.O. Box 33189  
Charlotte, North Carolina 28242

J. Michael McGarry, III, Esq.  
Debevoise & Liberman  
1200 Seventeenth Street, N.W.  
Washington, D. C. 20036

North Carolina MPA-1  
P.O. Box 95162  
Raleigh, North Carolina 27625

Mr. F. J. Twogood  
Power Systems Division  
Westinghouse Electric Corp.  
P.O. Box 355  
Pittsburgh, Pennsylvania 15230

Mr. J. C. Plunkett, Jr.  
NUS Corporation  
2536 Countryside Boulevard  
Clearwater, Florida 33515

Mr. Jesse L. Riley, President  
Carolina Environmental Study Group  
854 Henley Place  
Charlotte, North Carolina 28208

Richard P. Wilson, Esq.  
Assistant Attorney General  
S.C. Attorney General's Office  
P.O. Box 11549  
Columbia, South Carolina 29211

Mr. Henry Presler, Chairman  
Charlotte - Mecklenburg Environmental  
Coalition  
945 Henly Place  
Charlotte, North Carolina 28207

North Carolina Electric Membership  
Corp.  
3333 North Boulevard  
P.O. Box 27306  
Raleigh, North Carolina 27611

Saluda River Electric Cooperative,  
Inc.  
207 Sherwood Drive  
Laurens, South Carolina 29360

Mr. Peter K. VanDoorn  
Route 2, Box 179N  
York, South Carolina 29745

James P. O'Reilly, Regional Administrator  
U.S. Nuclear Regulatory Commission,  
Region II  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Robert Guild, Esq.  
P.O. Box 12097  
Charleston, South Carolina 29412

Palmetto Alliance  
2135 1/2 Devine Street  
Columbia, South Carolina 29205

Carol F. Kagan, Attorney  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555



# United States Department of the Interior

OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

ER 82/1412

MAR 9 1983

EO 413

Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing  
Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Ms. Adensam:

Thank you for your letter of January 10, 1983, transmitting copies of the final environmental impact statement for the Catawba Nuclear Station, Units 1 and 2, York County, South Carolina.

## General

We believe the final statement does not reflect adequate evaluation or consideration of our concerns that were sent to you previously on September 30, 1982 (copy enclosed).

We believe the potential impacts of the proposed thermal discharge on water quality standards and aquatic life as well as aquatic organism mortality resulting from impingement, entrainment, and thermal discharge have not been adequately described in either the draft or final statements. Failure to thoroughly evaluate and address these issues could result in significant loss of or damage to Lake Wiley's fish and wildlife resources.

## Water Quality

Our previous comments regarding water quality violations appear to be reflected only on page 5-4, where one sentence has been added to state that the area where thermal water quality standards will be violated is considered a mixing zone which is allowed by South Carolina regulations. However, the State water quality standards state that "a mixing zone means a designated area within which specified water quality standards are not applicable." Further, as reported in the final statement, the NPDES permit also does not delineate specific mixing zones. The area of the proposed mixing zone should have been presented in the draft statement for evaluation so that specific environmental impacts to aquatic resources from operation of the project would be available.

South Carolina standards also have an additional requirement that "a mixing zone shall not prevent free passage of fish." The final statement indicates fish will avoid the mixing zone discharge area during the summer, thereby eliminating "...free passage of fish." This dichotomy should have been resolved.


C002

Impingement, Entrainment, Thermal Discharge

The final statement concludes that monitoring of thermal effects will not be required since similar programs run at the Allen Steam Plant located on another arm of Lake Wylie have demonstrated that such monitoring is unnecessary. Section 5.5.2.1 presents an exceedingly limited discussion of differences in operating parameters of both Plant Allen and Catawba. We believe all of the salient comparisons between these two projects that support these conclusions should have been presented in tabular form in the final statement. The final statement, as written, does not present adequate data to support the conclusion that the potential significance of impingement, entrainment, and heated water discharge on the area's aquatic resources will not detrimentally affect any species inhabiting Lake Wylie. In the absence of such information, development and implementation of a monitoring program to document the actual impacts of impingement, entrainment, and thermal discharge on Lake Wylie's aquatic resources is necessary.

We hope these comments will be helpful to you.

Sincerely,

  
Bruce Blanchard, Director  
Environmental Project Review

Enclosure





# United States Department of the Interior

OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

ER 82/1412

SEP 30 1982

Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing  
Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Ms. Adensam:

Thank you for your letter of August 16, 1982, transmitting copies of the draft environmental statement for the Catawba Nuclear Station, Units 1 and 2, York County, South Carolina. Our comments are presented according to the format of the statement or by subject.

## Historic and Archeologic Impacts

We are concerned that the Catawba-Ripp 230 kV line passes within a half mile of the Kings Mountain National Military Park as noted on page 4-17. Though the statement asserts on page 5-12 that this will have no adverse effect on the park, we would like additional information concerning the exact location of this proposed line so that we may make a determination of impacts from its construction and operation.

The Nuclear Regulatory Commission should coordinate this issue with Mr. Robert Baker, Regional Director, Southeast Region, National Park Service, 75 Spring Street, S.W., Atlanta, Georgia 30303, Telephone: 404-221-5185; FTS 242-5185.

## Water Quality

This section indicates that under worst-case and average conditions, certain areas would not be in compliance with water quality standards. Further, the NPDES permit issued for the Catawba Nuclear Station does not limit either the station discharge temperature during operation or the resulting area of Lake Wylie subject to temperatures higher than those specified by State water quality standards.

This lack of a specific permit limitation, however, does not invalidate the temperature standard nor relieve the applicant of its responsibility to maintain that standard. The South Carolina Department of Health and Environmental Control indicates that no discharger may violate a State water quality standard, whether that particular standard is addressed in the NPDES permit or not. Thus, it appears that operation of the proposed Catawba Nuclear Station will be in violation of State water quality standards and the Clean Water Act (P.L. 92-500) under which those standards were developed.

Duce  
OK

8/21/82

8210040322

The projected annual loss of 27,000 gizzard shad due to impingement may be insignificant when considered alone. However, these losses may not be insignificant when considered in conjunction with losses at the existing Allen Steam Plant, other intakes on Lake Wylie, and natural mortality including cold-induced mortality. We believe the possibility that "many of these individuals" might be lost as a result of natural, cold-induced mortality is not a valid reason for determining that impingement losses will not impact the lake fishery. Only by monitoring impingement impacts after operation is begun can a determination be made regarding the significance of impingement losses. Also, an accurate accounting of actual losses is needed in order to determine cumulative impacts associated with present and future use of Lake Wylie and to adequately manage the lake's aquatic resources. We recommend an appropriate monitoring program be developed and presented in the final statement.

#### Entrainment

The determination that phytoplankton and zooplankton mortality as a result of entrainment is not expected to be significant seems premature, especially in light of the fact that 82,000 to 170,000 gpm of Lake Wylie's flow will pass through the station. Even if this alone were not significant, cumulative effects of all intakes on the lake must be considered. Actual impacts from the Catawba station can only be determined after operation begins—post-operational monitoring of entrainment is vital to maintenance of the aquatic resources of Lake Wylie. A detailed monitoring program to document entrainment losses should be included in the final statement.

#### Thermal Discharge

The statement indicates the thermal plume would cover about 105 acres in Lake Wylie under certain conditions. Although 105 acres is a small percentage of Lake Wylie, it represents considerable aquatic habitat which will become unavailable for fish and other aquatic species. The potential for fish kills is much enhanced when water temperatures exceed 90°F, as is the loss of eggs and larvae, incidences of diseases, and reduction in forage foods. Even though the overall fish population of Lake Wylie may not be threatened by the Catawba station's thermal discharge, a 105-acre area may become devoid of indigenous species. A program to monitor thermal effects of the Catawba Nuclear Station should be implemented following plant start-up.

#### Post-Operational Monitoring

The draft statement concludes that entrainment and impingement of aquatic organisms resulting from operation of the Catawba Nuclear Station will not detrimentally affect any species inhabiting Lake Wylie. Likewise, it concludes that the thermal plume for the station's operation will not detrimentally affect any species inhabiting Lake Wylie. Consequently, neither the applicant nor the U.S. Nuclear Regulatory Commission proposed post-operational monitoring programs of entrainment/impingement or thermal effects. While the above conclusions may prove accurate, post-operational monitoring to document actual impacts on aquatic organisms is necessary to ensure adequate protection of aquatic resources. Monitoring of operational impacts is particularly

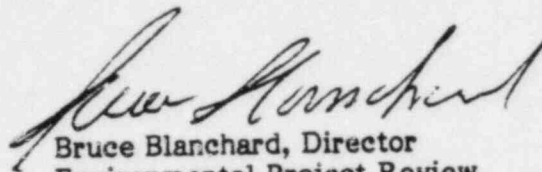
Elinor G. Adensam, Chief

3

important due to the volume of water that will be required by the Catawba Nuclear Station (from 82,000 to 170,000 gallons per minute); and the area of water that may exceed water quality standards for temperature.

We hope these comments will be helpful to you.

Sincerely,



Bruce Blanchard, Director  
Environmental Project Review