

FROM: Duke Power Company
 Charlotte, North Carolina 201
 B.B. Parker

DATE OF DOCUMENT: 2-11-72	DATE RECEIVED: 2-14-72	NO.:
LTR. X	MEMO:	REPORT:
OTHER:		

TO: R. C. DeYoung

ORIG.:	CC:	OTHER:
25 conf'd cys		
ACTION NECESSARY: <input type="checkbox"/>	CONCURRENCE <input type="checkbox"/>	DATE ANSWERED:
NO ACTION NECESSARY <input type="checkbox"/>	COMMENT <input type="checkbox"/>	BY:

CLASSIF: U POST OFFICE REG. NO:

FILE CODE: 50-269 (ENVIRO FILE)

DESCRIPTION: (Must Be Unclassified)
 Ltr notarized 2-11-72...furnishing
 comments on comments from Federal
 Agencies re Draft Detailed Statement
 for Oconee, Unit #1 w/attached

REFERRED TO	DATE	RECEIVED BY	DATE
J. G. Keppler w/2 cys for ACTION	2-15-72		

ENCLOSURES: brochure - Keowee-Toxaway
 Visitors Center..... (see rpt jacket)

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REMARKS:
 (Local PDR - Walhalla, S. C.)

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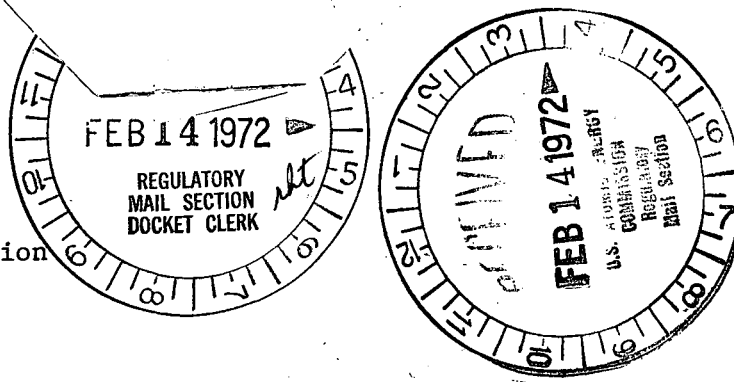
DUKE POWER C
POWER BU
422 SOUTH CHURCH STREET

P. O. Box 2178

B. B. PARKER
EXECUTIVE VICE PRESIDENT
& GENERAL MANAGER

February 11, 1972

United States Atomic Energy Commission
Division of Reactor Licensing
7920 Norfolk Avenue
Bethesda, Maryland



Attention: Mr. R. C. DeYoung, Assistant Director
for Pressurized Water Reactors

Subject: Comments in Reply to Questions Raised by Various Agencies
on the AEC Draft Detailed Statement
Oconee Nuclear Station
AEC Docket Nos. (50-269), -270, and -287

Dear Sir:

This is in reply to your letter transmitting comments in connection with
the Oconee Unit 1 draft environmental statement issued December 13, 1971.
We have reviewed these comments and wish to respond as follows:

Comments made in letters by agencies listed below require no further
explanation or additional information:

South Carolina Appalachian Council of Governments
Greenville County Planning Commission
Oconee County Planning Commission
Pickens County Planning and Development Commission
South Carolina Department of Parks, Recreation and Tourism (to S. C.
Water Resources Commission)
National Weather Service
Federal Power Commission
United States Coast Guard, Department of Transportation
United States Department of Agriculture

The enclosure listing the letters from the various agencies included the
"Advisory Council on Historic Preservation." We did not receive a copy
of this letter.

Our responses to the comments by the remaining agencies are as follows:

7778

LB

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South Carolina Pollution Control Authority - Dr. J. H. Webb's letter of January 20, 1972 to S. C. Water Resources Commission

The initial permit issued by the South Carolina Pollution Control Authority on November 19, 1970, contained a typographical error in the permissible discharge quantity. This permit provided for a discharge of 3040 million gallons of water per day while the application specified 3060 million gallons of water per day.

This oversight was called to the attention of the South Carolina Pollution Control Authority in a letter dated September 29, 1971 requesting a new permit to provide for a discharge of 3060 mgd.

South Carolina Wildlife Resources Department - Dr. J. H. Webb's letter of January 20, 1972 to S. C. Water Resources Commission

For the maximum expected daily operation of 10 hours continuous generation by the four Jocassee units without a corresponding operation of the Keowee Plant, the variation in the two reservoir levels is:

<u>Condition</u>	<u>Keowee</u> <u>Ft.</u>	<u>Jocassee</u> <u>Ft.</u>
At full pond elevation of 800 for Keowee and 1100 for Jocassee	1.4	3.3
At drawdown elevation of 778 for Keowee and 1086 for Jocassee (minimum elevation of storage reserved for pumped-storage)	1.8	3.6

Variation of three feet in Keowee and six feet for Jocassee is for a weekly cycle of generation-pumping operation during extended drought.

Duke Power Company will take whatever responsible action that might be necessary to comply with the water quality standards of the state of South Carolina; consequently, thermal intrusions into Lake Hartwell from Lake Keowee will be in accordance with South Carolina's water quality criteria.

United States Department of Commerce
Bureau of Domestic Commerce - Edwin B. Shykind's letter of December 29, 1971 to Dr. S. R. Galler

This letter appears to contain general questions for clarification concerning Draft Detail Statement and should be resolved by the AEC.

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With respect to the comments concerning gaseous radioactive waste treatment and the effects of thermal discharge, we believe the FSAR and the Environmental Report are very specific in both areas.

United States Department of Commerce
Office of the Assistant Secretary for Economic Affairs - Robert R. Miki's
letter of January 11, 1972 to Dr. S. R. Galler

The benefit of \$30,000 in Table X-4 of the Draft Detailed Statement is due to funds made available to University of South Carolina for archeological investigations that either would not have been made in absence of Keowee-Toxaway Project or that would have had to be made from other sources. We concur with the inclusion of this amount as a "Benefit," although it is not included as a benefit in our Environmental Report.

United States Department of Commerce
National Oceanic and Atmospheric Administration - Dr. William Aron's
letter of January 12, 1972 to Dr. S. R. Galler summarizing comments from the following agencies:

Environmental Research Laboratories letter of December 23, 1971

It is not clear what value of Chi/Q was used by Dr. Aron and his associates in their evaluation of the average annual relative concentration of radionuclides. The final average annual Chi/Q is specified in Technical Specification 3.9.3 on page 3.9-2 in Section 15 of the Technical Specifications. Since this figure does not appear in Section 2 of the FSAR, this probably accounts for the misunderstanding.

Using the formula specified in Technical Specification 3.9.3.1 of the Oconee FSAR Section 15 on page 3.9-2, it may be noted that conservatism in our method of dose calculations is always assured due to the use of instantaneous release rates rather than averaging over non-release times. This means that although there may be occasions when the Chi/Q is worse than the average during an intermittent release, this is overcome by the long periods of time when no releases occur. The resulting doses from these intermittent releases are so insignificant that an error of a magnitude of 2 to 4 does not materially affect the conclusion that is reached from these types of analyses. This conclusion is that none of these releases, which were examined in detail, will endanger the health and safety of the general public.

National Marine Fisheries Service - Robert F. Hutton's letter to Dr. William Aron

Benthic sampling is included in the radiological monitoring program. Appendix F, Page 6 of the supplement lists the sampling features of this monitoring program and Item 6 includes: "Aquatic Vegetation, Algae and Plankton, Bottom Organisms and Crustaceans." Duke Power anticipates that this aspect of the sampling will continue to be reviewed periodically with the S. C. Wildlife Resources Department, the U. S. Fish and Wildlife Service and others. Also see attached Table 2-1a from FSAR. This revised page was not available at time Appendix F report was issued. Therefore although stated in text, it is not in table. This probably accounts for the misunderstanding.

National Marine Fisheries Service - R. T. Whiteleather's letter of November 23, 1971

1. Adherence to NMFS Minimum Radiological Monitoring Program

The Oconee monitoring program as described in Appendix F of the supplement appears to meet and substantially exceed the minimum requirements outlined in the NMFS memorandum by John F. Baptist dated October 12, 1971.

2. Responsiveness to Future Problems if they Should Develop

In addition to the Company's voluntary and publicly stated commitments to resolve any unforeseen problems, further assurance of any needed corrective action is provided by the various water pollution regulations, by provisions in the numerous operating permits, and by the fact that monitoring and study programs will yield information concerning effects on fish and other aquatic life. One of these programs is an extensive study by the Bureau of Sport Fisheries and Wildlife to be conducted on Lakes Keowee and Jocassee.

Department of Housing and Urban Development - Leo J. Zuber's letter of January 14, 1972 to Mr. Lester Rogers

The Department of Housing and Urban Development has commented that extreme care should be taken to establish good design criteria and development control for lakeside subdivision development and plans and proposals should be coordinated with

TYPE OF SAMPLE

Table 2-1a
OCONEE OPERATIONAL ENVIRONMENTAL
RADIOACTIVITY MONITORING PROGRAM

Code of Collection Frequency

Monthly M
Quarterly Q
Annually A

		H ₂ O Finished - Water Supply	H ₂ O Raw - Water Supply	H ₂ O Surface - River, Lakes	Rain, Settled Dust - Fallout	Air - Particulate	Vegetation - Terrestrial	Vegetation - Aquatic and/or Plankton, Bottom Organisms, Crustaceans	Bottom Sediment	Water Supply & Lakes	Radiation Dose & Rate TLD and Instrument	Animals (3) 1 Mile Radius	Fish (3) Lakes	Milk - Local Dairies and Nearby Farms
	000	Site: Visitors Center, Station #1												
	000.1	Station #2												
	000.2	Station #3												
6.	000.3	Bridge N of Site on New 183 Connecting Canal												
6.	000.4	Near Liquid Effluent Release Point (closest point where found downstream)												
6.	000.5	1 Mile Radius of Site (Including Lake Keowee, upstream of release point)												
	000.6	Lake Keowee Cooling Water Discharge												
	000.7	@ Bridge on 183 Existing												
	000.9	Site Fence, Various Locations												
	000.10	Exclusion Area, Various Locations												
	001	Salem: Volunteer Fire Dept. Lot												
	002	Walhalla: Branch Road Sub Station												
6.	002.1	7.5 Miles West of Site on Hwy 183												
6.	002.2	Nearby farms in prevailing wind directions												
	003	Keowee: High School Hwy. 16												
	004	Seneca: Oconee Memorial Hospital												
	004.1	Water Supply, Lake Keowee Intake												
	005	Newry: Former High School on S. C. 130												
	005.3	Hwy. 27 at Bridge												
	006	Clemson: Meteorology Plot												
6.	006.1	Water Supply												
6.	006.2	Intake Hartwell Reservoir K-3												
	007	Central, S. C.: Joint Sub Station Hwy. 93												
	008	Liberty, S. C.: Branch Office Yard												
	009	Six Mile, S. C.: Microwave Tower Hwy. 137												
	010	Pickens, S. C.: Branch Office Yard												
	011	Miscellaneous: Location, Samples and Frequency vary												
	012	Anderson, S. C.: Water Supply												
6.	013	Hartwell Reservoir: South of Keowee Dam as close to liquid effluent release point as they can be obtained.												

Notes: 1. Fish and animals will be collected in cooperation with the South Carolina Wildlife Resources Department.

6. 2. Fish specimens will be collected from Lakes, Keowee and Hartwell, subjected to gamma analysis and analyzed for specific radionuclides found, as well as gross beta minus K-40, strontium-90 and cesium-137.

* 3. Lakes Keowee and Hartwell will be sampled annually for tritium analysis by outside service. (000.5, 013)

** 4. Collection depends on availability

6. *** 5. Lake Keowee which is above the liquid effluent release point is considered as a control.

COLLECTION FREQUENCY

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area wide planning agency for the region concerned. Duke recognizes the need for proper planning of such developments. A long range development plan has been prepared by Crescent Land and Timber Corporation, a Duke subsidiary, in coordination with South Carolina Department of Parks, Recreation and Tourism and planning agencies in Oconee and Pickens Counties. Appendix A of the Supplement to Environmental Quality Features of Keowee-Toxaway has a list of agencies contacted by Duke in this connection. Duke plans to continue consulting with state and local planning agencies to achieve optimum lakeside development.

Department of the Army
Savannah District Corps of Engineers - Col. Howard L. Strohecker's
letter of January 14, 1972 to Mr. Lester Rogers

The concerns raised by Colonel Strohecker in the last five paragraphs of his letter will be resolved satisfactorily with all concerned during the process of seeking a Corps of Engineers Refuse Act Permit under Section 13 of the Rivers and Harbors Act of 1899. These concerns are similar to those listed by EPA on the same subject.

Our responses to comments from the Department of the Interior and the Environmental Protection Agency will be forwarded to you on or before February 16, 1972.

DUKE POWER COMPANY

By s/B. B. Parker
B. B. Parker
Executive Vice President
and General Manager

ATTEST:

s/John C. Goodman
Assistant Secretary
(Seal)

B. B. PARKER has subscribed and sworn to the above statement before me, a Notary Public in and for the State of North Carolina and County of Mecklenburg, this 11th day of February, 1972.

My Commission Expires:

August 5, 1976

s/B. J. Taylor
Notary Public
(Notarial Seal)