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FROM: Duke Power Company Charlotte, North Carolina 28201 W. S. Lee	DATE OF DOC: 3-30-73	DATE REC'D 4-3-73	LTR x	MEMO	RPT	OTHER
TO: A. Giambusso	ORIG 3 signed	CC 297	OTHER	SENT AEC PDR X SENT LOCAL PDR X		
CLASS: <u>U</u> PROP INFO	INPUT	NO CYS REC'D 300	DOCKET NO: 50-270 50-287			

DESCRIPTION:
Ltr notarized 3-30-73 ..re our 3-15-73 ltr...
....trans the following:

ENCLOSURES:
REVISION NO. 2 TO SUPPL ENVIRO REPORT
consisting of APPENDIX "Q" to document entitled
"Supplement to Environmental Quality Features
of Keowee-Toxaway Project", dtd Oct. 1971.

ACKNOWLEDGED

DO NOT REMOVE

PLANT NAMES: Oconee, Units 2 & 3

(300 cys rec'd)

FOR ACTION/INFORMATION 4-3-73 fod

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DUKE POWER COMPANY
POWER BUILDING, BOX 2178, CHARLOTTE, N. C. 28201

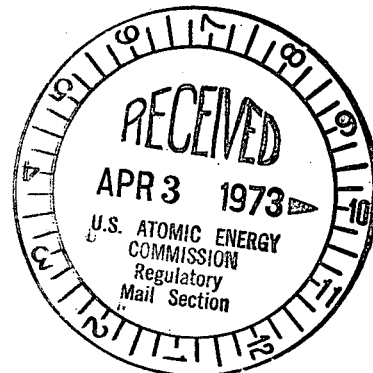
Regulatory

File Cy.

WILLIAM S. LEE
SENIOR VICE PRESIDENT,
ENGINEERING AND CONSTRUCTION

March 30, 1973

Mr. Angelo Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545



Re: Oconee Nuclear Station, Units 2 and 3
Docket Nos. 50-270 and -287
Supplemental Environmental Report

Dear Mr. Giambusso:

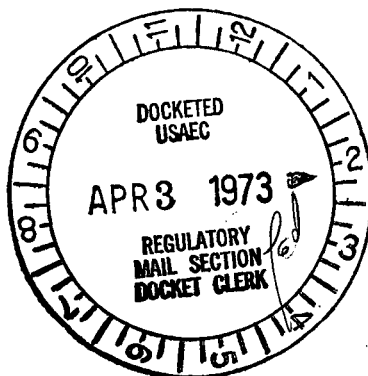
Duke Power Company submits herewith Revision No. 2 to its Supplemental Environmental Report for the Oconee Nuclear Station, Units 2 and 3, under construction pursuant to Provisional Construction Permits CPPR-34 and -35. Please insert Revision No. 2 as Appendix Q to the document entitled, "Supplement to Environmental Quality Features of Keowee-Toxaway Project," and dated October 1971.

This revision is submitted in response to Mr. G. K. Dicker's letter of March 15, 1973, concerning the updating of the Final Environmental Statement for Oconee Nuclear Station.

We believe this data demonstrates that no new significant information relevant to the environmental considerations set forth in Appendix D, 10 CFR Part 50, is presented. We therefore assume that, in accordance with Appendix D, there will be no duplication of the formal environmental review already conducted.

Respectfully submitted,

s/W. S. Lee
W. S. Lee



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2156

Mr. Angelo Giambusso
Page 2
March 30, 1972

W. S. LEE, being duly sworn, states that he is Senior Vice President of Duke Power Company; that he is authorized on the part of said Company to sign and file this revision; and that all statements and matters set forth therein are true and correct to the best of his knowledge.

s/W. S. Lee

W. S. Lee, Senior Vice President

ATTEST:

s/John C. Goodman, Jr.

John C. Goodman, Jr.
Assistant Secretary
(Seal)

Subscribed and sworn to before me this 30th day of March, 1973.

s/Edna B. Farmer
Notary Public
(Notarial Seal)

My Commission Expires:

October 24, 1977

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- Appendix H - R M Jenkins' letter to W D Adair, September 8, 1971
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- Appendix M - Stewart W Udall's letter of April 7, 1966, to L C White giving the Department of the Interior's comments on the Keowee-Toxaway Project
- Appendix N - W T Linton's letter of March 8, 1965, to J H Gutride giving the South Carolina Water Pollution Control Authority's Division of Sanitary Engineering's approval of the Keowee-Toxaway Project
- Appendix O - Economic Effect of the Keowee-Toxaway Project
- Appendix P - S W Stokes' letter of September 7, 1971, to W S Lee defining economic and recreational benefit of large game at Keowee-Toxaway Project
2. | Appendix Q - Response to G. K. Dicker's letter of March 15, 1973 |

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Received w/Ltr Dated 3-30-73

DUKE POWER COMPANY

OCONEE NUCLEAR STATION

UNITS 2 AND 3

SUPPLEMENTAL ENVIRONMENTAL REPORT

DOCKETS 50-270 AND -287

APPENDIX Q

Submitted with Revision 2

March 30, 1973

APPENDIX Q

In response to questions contained in Mr. Gordon K. Dicker's letter of March 15, 1973, the following information is submitted, tabulated by question number.

Question No. 1:

Are the data submitted in the Catawba Nuclear Station application a reasonably current estimate of peak loads for 1973, 1974, and 1975 and of the hydroelectric and thermal generating capacity that will be installed within the Duke Power Company system to meet these loads?

Answer No. 1:

The data submitted in the Catawba Nuclear Station application are a reasonably current estimate of peak loads for 1973, 1974, and 1975. Presented below is a summary of the information contained in that application, updated with the most current information available.

The estimated peak load and dependable capacity resources, including additions scheduled and planned are:

1973 Summer peak load	8,101 MW
1972 Summer dependable capacity	8,295 MW
1972 Summer purchases	(344)
Cliffside No. 5 increase	32
Oconee Unit 1	886
Purchase from SCE&G (1973 summer only)	250
Purchase from APCO (1973 summer only)	250
Reduction in purchase from CP&L	<u>(20)</u>
1973 Summer Dependable Capacity	9,349 MW
1974 Summer peak load	8,838 MW
1973 Summer dependable capacity	9,349 MW
1973 Summer purchase	(500)
Reduction in purchase from CP&L	(20)
Retirements	(79)
Oconee Unit 2	886
Belews Creek No. 1	1,143
Jocassee 1&2 (pumped storage)	<u>305</u>
1974 Summer Dependable Capacity	11,084 MW

1975 Summer peak load	9,635 MW
1974 Summer dependable capacity	11,084 MW
Reduction in purchase from CP&L	(18)
Oconee Unit 3	886
Belews Creek No. 2	1,143
Jocassee 3&4 (pumped storage)	<u>305</u>
1975 Summer Dependable Capacity	13,400 MW

Question No. 2:

Have any agreements been made with APS, AEP, and other generating systems for temporary purchases of power in 1973 and 1974, such as the temporary arrangements made in 1972?

Answer No. 2:

An agreement has been made with South Carolina Electric and Gas Company for temporary purchases of 250 MW from May through August, 1973. An additional agreement with Appalachian Power Company provides for the purchase of 250 MW from May through October, 1973. No agreements for temporary power purchases have been made for 1974.

Question No. 3:

How is the installed capacity in 1. above affected by a forced outage of one or more of the major Duke Power generating stations?

Answer No. 3:

Duke Power Company's criteria for reserves includes allowances at the time of peak load for:

1. Load increases brought on by severe weather. (Peak load estimates are based on average weather.)
2. The unscheduled outage of the largest generating unit.
3. Forced outages or reductions in capability of other generating units, based on operating experience.
4. Forecast error or the outage of additional generation equivalent to the largest unit.

The 1973 installed generating capacity (including Oconee Unit 1) will be 8540 MW. With a forced outage of the largest generating unit, Oconee Unit 1, the anticipated summer peak load of 8,101 MW will exceed system generating capacity by 447 MW. Clearly, the reserve criteria will not be met, and additional power must be purchased and/or loads reduced.

In 1974, the system capacity (including both Oconee Unit 1 and 2) will be 10,795 MW. With the outage of Belews Creek No. 1 (1,143 MW) and an anticipated summer peak load of 8,838 MW, the system will have an excess reserve of 814 MW. This reserve is not sufficient to meet Criteria No. 4 above.

The installed capacity in 1975 will be 13,129 MW (including Oconee Units 1, 2, and 3). With the outage of either Belews Creek No. 1 or 2 (1,143 MW), and the anticipated summer peak load of 9,635 MW, the installed reserve will be 2,351 MW, which should be adequate to meet the reserve criteria.

Question No. 4:

What is the total installed capacity within the Duke Power system that is provided by combustion turbines:

Answer No. 4:

The total installed capacity within the Duke Power system that is provided by combustion turbines is 638 MW:

Buck	93 MW
Riverbend	120
Dan River	85
Lee	90
Buzzard Roost	196
Urquhart	40
Dan River (diesel)	<u>14</u>
	638 MW

Question No. 5:

Your "Statement by the Applicant Why the Construction Permits (for Oconee Units 2 and 3) Should Not be Suspended" (pages 12, 13, and 14) presented cost data on alternate sources of power. Are these cost data current with today's fuel prices?

Answer No. 5:

The average cost of burnup of nuclear fuel over the next 10 years in the Oconee Station is expected to be approximately 15 cents per million BTU. At 15 cents per million BTU, and assuming a heat rate of 10,000 BTU per net kilowatt hour, each of the 866 megawatt Oconee units will have a daily fuel expense based on full load operation of approximately \$31,900.

If, during periods of milder-than-normal weather in the winter of 1973-74, older fossil-fired units were to be used to generate energy to replace that which would not be available should operation of Oconee Unit 2 be delayed, the cost of fuel consumed per day would be \$103,900. This is based upon a current fuel cost of 46.7 cents per million BTU and an average heat rate of 10,674 BTU per kilowatt hour to produce 886 megawatts each day. Thus, each day that each unit of the Oconee Station should be delayed during periods of relatively mild weather results in increased fuel expense of approximately \$72,000.

Under extreme weather conditions, combustion turbines are used to help meet peak loads. Combustion turbines have an average heat rate of approximately 15,650 BTU per kilowatt hour and a winter-time fuel cost of approximately 87 cents per million BTU. Utilizing combustion turbines with a generating capacity of 886 megawatts for one full day would result in a fuel cost of \$289,500 per day. Thus, having to replace energy that could be generated by one unit of Oconee Nuclear Station with energy generated by combustion turbines during cold weather would cost an additional generating expense of \$257,600.

All of these expenses would have to be passed along to consumers as a part of necessary cost of service through increased rates.

Question No. 6:

Was the Duke Power system required to reduce load in 1972 in a similar manner to the load reductions in June, 1971, and September, 1970, because of unavailable capacity?

Answer No. 6:

There were no voltage or load reductions during 1972; however, system capacity had to be augmented by the purchase of approximately 236,000,000 kilowatt-hours from other generating systems.