

SOUTH CAROLINA ELECTRIC & GAS COMPANY

POST OFFICE 764

COLUMBIA, SOUTH CAROLINA 29218

O. W. DIXON, JR.
VICE PRESIDENT
NUCLEAR OPERATIONS

October 24, 1983

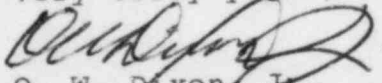
Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Virgil C. Summer Nuclear Station
Docket No. 50/395
Operating License No. NPF-12
Thermal Effects Study Plan
Clarification

Dear Mr. Denton:

In compliance with Appendix B of the Virgil C. Summer Nuclear Station Operating License, South Carolina Electric and Gas Company hereby submits a copy of our letter to the South Carolina Department of Health and Environmental Control (SC DHEC) clarifying points of the Thermal Effects Study Plan as contained in the Final Environmental Statement.

Very truly yours,


O. W. Dixon, Jr.

WRM:OWD/fjc

cc: V. C. Summer
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SOUTH CAROLINA ELECTRIC & GAS COMPANY

POST OFFICE BOX 764

COLUMBIA, S. C. 29218

October 6, 1983

Mr. Gary Grant
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, S. C. 29201

Dear Mr. Grant,

This letter is a summary of the meeting between representatives of South Carolina Electric and Gas Company, Dames and Moore, and the South Carolina Department of Health and Environmental Control which was held in your office on September 9, 1983. In attendance were the following persons:

Gary Grant, SCDHEC
Doug Darr, SCDHEC
Tom Simpson, D&M
Terry White, D&M
Chuck Zimmerman, D&M
Steve Summer, SCE&G

The above referenced meeting was held to clarify certain matters concerning the Thermal Effects Study Plan, the 316(b) Demonstration Study Plan, and the related NPDES Permit (# SC0030856) for Virgil C. Summer Nuclear Station. The items and dates listed below were discussed and concurrence obtained by the parties involved.

Duration of Studies

Thermal Effects Monitoring - Two years of operational data is required for the thermal effects study. The operational portion of the thermal effects study is scheduled to begin at commercial operation of Virgil C. Summer Nuclear Station. For the purposes of these monitoring programs commercial operation is specified as October 1, 1983. Virgil C. Summer Nuclear Station achieved initial criticality on October 22, 1982 and has been operating at substantial power levels, disregarding outages, since late 1982 (30% in late November 1982, 50% in mid-December 1982). It is anticipated that data from the precommercial operating period will be adequate for partial fulfillment of the two year monitoring requirement. The South Carolina Department of Health and Environmental Control (SCDHEC) will review the 1983 data results to determine if they may be used in this manner.

316(b) - This study will begin October 1, 1983 (sampling will begin within 2 weeks of October 1) and continue for 1 year. This phase of the 316 studies will meet both impingement and entrainment requirements.

Thermal Mapping - The postoperational Thermal Mapping will continue for 1 year commencing on October 1, 1983. Sampling periods will coincide as closely as possible to the sampling periods used in the preoperational thermal mapping program (quarterly).

Thermal Effects Study

Ichthyoplankton net - The net size stated in the Thermal Effects Study Plan and 316(b) Demonstration Study Plan is 0.5 meter diameter with 505 micrometer mesh. The nets used for the preoperational and precommercial study period are 0.75 meter with 363 micrometer mesh. The 0.75 meter/363 micrometer mesh nets will be utilized for the remainder of the study period.

Aquatic Macrophytes - Questions were raised as to the extent of "quantitative" sampling. No changes in sampling methodology are necessary.

Macroinvertebrates - Dames & Moore will increase the number of samples from a total of 3 to a total of 4 per location to provide replicates at both the littoral and profundal zones. Collections by dip nets and hand picking, as stated in Thermal Effects Study Plan, are not necessary and will not be made.

Rotenoning - Thermal Effects Study Plan lists "Station B" (Fairfield Pumped Storage tailrace) as one of the sites where rotenoning is to be conducted. With the change from a creek to a tailrace environment rotenoning is impractical. Rotenoning will not be conducted at this station.

Reporting - SCDHEC will review the 1982 Biological Monitoring Report prior to issuance to determine if it can be used as the Final Preoperational Report.

Six month reports will be submitted during the operational phase of the study and are due on the following dates:

- July 1, 1984 (October 1, 1983 - March 31, 1984)
- January 1, 1985 (April 1, 1984 - September 30, 1984)
- July 1, 1985 (October 1, 1984 - March 31, 1985)
- January 1, 1986 (April 1, 1985 - September 30, 1985)

These dates may be changed depending on the applicability of the 1983 data. The last six month report will serve as the final report for preoperational and operational phases of the study.

Mr. Gary Grant
October 6, 1983
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316(b) Study

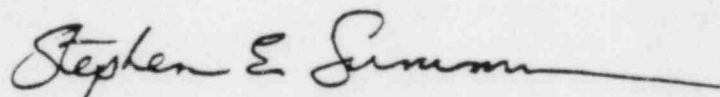
Ichthyoplankton net - The size of net used will be 0.75 meter/363 micrometer mesh.

Traveling Screens - One screen (of six) will be randomly chosen to be sampled for each 24 hour sampling period assuming that preliminary samples indicate an even fish distribution across all six screens. All screens will be washed prior to each 24 hour sampling period.

Reporting - The Final Report is due February 1, 1985.

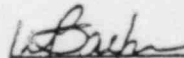
This letter has been reviewed and concurrence obtained by representatives of the South Carolina Department of Health and Environmental Control and the attending Dames & Moore technical consultants.

Sincerely,



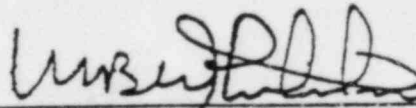
Stephen E. Summer, Supervisor
Non-Radiological Environmental Programs

Approved By:



W. R. Baehr, Manager
Corporate Health Physics and
Environmental Control

Approved By:



M. B. Whitaker, Group Manager
Nuclear Engineering and
Licensing

mec

cc: D. A. Nauman
W. E. Moore/E. M. Watts
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