

April 20, 1989

Docket No. 50-395

Mr. O. S. Bradham
Vice President, Nuclear Operations
South Carolina Electric & Gas Company
Virgil C. Summer Nuclear Station
P. O. Box 88
Jenkinsville, South Carolina 29065

Dear Mr. Bradham:

Distribution:

Docket File ACRS (10)
NRC PDR
Local PDR
PDII-1 r/f
S. Varga (14E4)
G. Lainas
E. Adensam
P. Anderson
J. Hayes
OGC
E. Jordan (MNBB 3302)
B. Grimes (9A2)

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR AMENDMENT INVOLVING
THE 40 YEAR OPERATING LICENSE EXTENSION - VIRGIL G. SUMMER
NUCLEAR STATION, UNIT NO. 1 (TAC 59402)

On August 2, 1985 you requested an amendment to the Operating License (OL) for the Virgil C. Summer Nuclear Station, Unit 1 which would change the duration of the license from 31 years to 40 years. You had requested that the Commission extend OL NPF-12 so that it is effective for 40 years from the date of issuance of the operating license (August 6, 1982) rather than 40 years from the date of issuance of the construction permit (March 21, 1973).

We have reviewed your initial submittal and a supplement which you provided on March 30, 1988. Based upon this review, we find that your submittals are insufficient in terms of addressing the environmental impacts of the extension of the operating license. The information supporting your amendment request needs to address how operation has compared with that predicted by the NRC staff's Final Environmental Statement (FES) (NUREG-0719). In addition, your submittal needs to address the impact of the additional period of operation of the Summer Station and whether it will result in greater impacts than those predicted in your Environmental Report (ER) and our FES. Your submittals should provide an evaluation of what the data to date has shown with respect to the impact of operation of the Summer Station. The submittal should demonstrate that the operation of the Summer Station has not resulted in a negation of the conclusions reached by the NRC staff in their issuance of our FES. Enclosure 1 consists of those environmental areas which were addressed in the Summer FES and which would seem an appropriate starting point in order for the staff to decide whether an extension to the license is appropriate. It should be noted that environmental conditions around the Summer Station may have changed since the issuance of the FES and you may need to address other areas in your submittal.

The staff has also determined that there are certain technical areas which need to be addressed because of the extension of the license. Enclosure 2 contains examples of the type of information which must be addressed. Again, there may be some site specific items which need to be addressed which are more germane to Summer now and which were not part of the initial licensing review.

Mr. O. S. Bradham

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April 20, 1989

The information contained in this letter will be the subject of our meeting at the Summer Station the week of April 17, 1989.

Sincerely,

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John J. Hayes, Jr., Project Manager
Project Directorate II-1
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosures:
As stated

cc w/encl:
See next page

(LTR. TO BRADHAN FROM JJHAYES)

LA:PDII-1:DRPR:NRR
PDAnderson
04/11/89

PM:PDII-1:DRPR:NRR
JJHayes:d1m
04/11/89

D:PDII-1:DRPR:NRR
EGAdensam
04/20/89

Mr. O. S. Bradham
South Carolina Electric & Gas Company

Virgil C. Summer Nuclear Station

cc:

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South Carolina Electric & Gas Company
Mr. A. R. Koon, Jr., Manager
Nuclear Licensing
Virgil C. Summer Nuclear Station
P. O. Box 88
Jenkinsville, South Carolina 29065

ENVIRONMENTAL ITEMS WHICH MAY NEED TO BE ADDRESSED

FOR 40 YEAR OPERATING LICENSE EXTENSION

1. Impacts on Land Use
2. Hydrologic Impacts of Operation
 - A. Surface water
 - B. Groundwater
 - C. Water quality
 - D. Thermal
 - E. Chemical wastes and Sanitary wastes
3. Impacts on Biota
 - A. Terrestrial Environment
 - B. Aquatic Environment
 - i) Effects of thermal discharge in Monticello Reservoir.
 - ii) Effects of thermal discharge on biota of Broad and Congaree River System.
 - iii) Effects on dissolved oxygen.
 - iv) Cooling system impingement/entrainment
 - v) Chemical discharges
4. Radiological Impacts
 - A. Exposure Pathways
 - B. Dose Commitment
 - i) Offsite Individuals
 - ii) Populations
 - iii) Occupational
 - C. Impact on Man
 - D. Impact on Biota
 - E. Risk to Workers
 - F. Risk to Individuals
 - G. Risk to Population
 - H. Potential Accidents
5. Other Impacts
 - A. Social Impacts of Operating Labor Force
 - B. Economic Impacts
 - C. Recreational Impacts

6. Impact on Uranium Fuel Cycle

- A. Water Use
- B. Land Use
- C. Fossil Fuel Consumption
- D. Chemical Effluents
- E. Radioactive Effluents
- F. Radioactive Wastes
- G. Occupational Exposure
- H. Transportation
- I. Fuel Cycle

7. Air Quality Impacts

8. Decommissioning

9. Short-Term Uses Versus Long-Term Productivity

10. Irreversible and Irretrievable Commitment of Resources

11. Historic Preservation

12. Plant Modifications

PLANT TECHNICAL ITEMS WHICH MAY NEED TO BE ADDRESSED
FOR 40 YEAR OPERATING LICENSE EXTENSION

1. Mechanical Equipment
2. Structures
3. Reactor Vessel