

## Attachment D

Letter from Mary Santini, Duke Energy  
to  
Dr. John F. Brown, SC Dept. of Health and Environmental Control  
requesting information on assessment of public health impacts  
from thermophilic organisms from Catawba operation  
dated June 7, 2000

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**Duke Power**

Group Environment, Health & Safety  
13339 Hagers Ferry Road (MG03A3)  
Huntersville, NC 28078-7929

June 7, 2000

Dr. John F. Brown  
State Toxicologist  
Health Hazard Evaluation  
SC Department of Health and Environmental Control  
Box 101106  
Columbia, SC 29211

Subject: Duke Power  
Catawba Nuclear Station, Units 1 and 2  
Environmental Report – Operating License Renewal  
Thermophylic Organisms

Dear Dr. Brown:

Duke Power Company is preparing an application to the US Nuclear Regulatory Commission (USNRC) to renew the operating licenses for Catawba Nuclear Station (CNS). CNS is a two-unit, nuclear fission steam electric generation station, located on Lake Wylie in York County, approximately 8 miles west north west of Fort Mill, SC. Catawba is owned by Duke Power Company, North Carolina Electric Membership Corporation, North Carolina Municipal Power Agency Number 1, Piedmont Municipal Power Agency, and the Saluda River Electric Cooperative, Inc. but totally operated by Duke Power Company.

Catawba Unit 1 was issued a full power license on January 17, 1985, and Unit 2 was issued a full power license on May 15, 1985. The current NRC licenses expire on December 6, 2024 (Unit 1) and on February 24, 2026 (Unit 2). The extended licenses would be for a 20 year period (approximately) beyond the current license expiration dates, with the actual expiration date dependent on the date of issuance for the extended licenses.

The USNRC requires that an applicant assess certain site-specific environmental issues related to the continued operation of the plant during the term of the extended license. Among the issues to be evaluated is the impact of thermophylic organisms on public health. Specifically, 10 CFR 51.53(c)(3)(ii)(G) requires that:

*If the applicant's plant uses a cooling pond, lake, or canal or discharges into a river having an annual average flow rate of less than  $3.15 \times 10^{12}$  ft<sup>3</sup>/year ( $9 \times 10^{10}$  m<sup>3</sup>/year), an assessment of the impact of the proposed action on public health from thermophilic organisms in the affected water must be provided.*

As part of this evaluation the NRC suggests that the applicant consult with the state agency responsible for environmental health as to whether there is a concern about the potential existence and concentration of *Naegleria fowleri* in the receiving waters for the plant cooling water discharge.

To facilitate your review of this issue, I have included copies of portions of NUREG-1437 Generic Environmental Impact Statement for License Renewal of Nuclear Plants (GEIS). The GEIS was prepared by the NRC to evaluate the impact of environmental issues related to license renewal of nuclear plants and to determine which environmental issues can be evaluated generically and which issues require plant specific evaluation. The Executive Summary and Chapter 1 provide a description of the evaluation process used in the GEIS. GEIS Section 4.3.6 contains an evaluation of the impact of microorganisms on human health. Appendix D to the GEIS provides background information used in the GEIS evaluation. Copies of these sections are included as Attachment 1.

Duke Power requests that you review the attached information and respond with your comments on any public health concerns you may have regarding the potential presence of *N. fowleri* and other thermophylic organisms in Catawba's thermal discharge plume.

Please feel free to contact me at 704-875-5346 or [mmsantini@duke-energy.com](mailto:mmsantini@duke-energy.com) if you have any questions regarding this matter.

Thank you for your timely assistance.

Sincerely,

A handwritten signature in cursive script that reads "Mary M. Santini".

Mary M. Santini  
Microbiologist  
Group Environment, Health & Safety

Attachments

cc :

Henry J. Porter	SCDHEC Division of Radioactive Waste Management
Cheryl Peed	Duke Power Catawba Nuclear Station
Tim Harris	Duke Power Catawba Nuclear Station
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