

October 4, 1983

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USNRC

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

'83 OCT -6 AM 11:29

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD  
OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

In the Matter of

DUKE POWER COMPANY

(Cherokee Nuclear Station,  
Units 1, 2, and 3)

Docket Nos. STN 50-491  
STN 50-492  
STN 50-493

MOTION OF DUKE POWER COMPANY TO  
TERMINATE APPELLATE JURISDICTION

Duke Power Company ("Duke") requests that the Atomic Safety and Licensing Appeal Board terminate its appellate jurisdiction with respect to Cherokee Nuclear Station retained in ALAB-482 and ALAB-540 on the environmental effects of radon releases from the mining and milling of uranium for reactor fuel and dismiss as moot so much of the proceedings before it as pertains to Cherokee.

Duke has attached to this Motion a letter to Harold R. Denton, dated September 21, 1983, which explains that the Board of Directors of Duke Power Company voted earlier this year to terminate construction of Unit 1 of Cherokee Nuclear Station. Units 2 and 3 had been previously cancelled in November 1982. In this letter, Duke tendered back to the NRC the Cherokee construction permits and asked that the dockets be deleted. Therefore, Duke moves that this Board terminate and dismiss as moot, without prejudice, the appellate proceedings with respect to Cherokee. See Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-723, 17 NRC \_\_\_\_\_ (slip op.) (April 14, 1983).

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The Appeal Board took up jurisdiction in Cherokee and sixteen related proceedings over the issue of the environmental effects of the release of radioactive radon gas (Rn-222) to the atmosphere resulting from the mining and milling of uranium for reactor fuel. See Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-480, 7 NRC 796 (1978) (incorporating the radon record in Perkins, LBP-78-25, 8 NRC 87 (1978) in Cherokee and sixteen other licensing cases).

Pursuant to 10 C.F.R. 2.717(a) (as construed in Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), ALAB-699, 16 NRC 1324 (1982)), the Licensing Board's jurisdiction terminated when the exception to its last partial initial decision was filed. Id. at 1326-27. The Licensing Board's decisions on all issues concerning Cherokee except the radon question were affirmed as modified<sup>1</sup> by the Appeal Board. See Duke Power Co. (Cherokee Nuclear Station, Units 1, 2, and 3), ALAB-482, 7 NRC 979 (1978). The Appeal Board retained jurisdiction over the radon issue - the only remaining issue in Cherokee. Id. at 981, see also Philadelphia Electric Co. (Peach Bottom Atomic Power Station) ALAB-540, 9 NRC 428, 435 (1979).

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<sup>1</sup> The Appeal Board made a "minor amendment" to one of the Licensing Board decisions to substitute for the phrase "anchored to bedrock" the more accurate phrase "founded on bedrock and/or fill concrete." See Duke Power Co. (Cherokee Nuclear Station, Units 1, 2, and 3) ALAB-482, 7 NRC 979 981 (1978).

II

In Peach Bottom, ALAB-540, 9 NRC 428 (1979) the Appeal Board consolidated and ordered heard first those five radon proceedings with active intervention, while Cherokee and the other cases without intervenors contesting the radon issue were held in abeyance. In Philadelphia Electric Co. (Peach Bottom Atomic Power Station) ALAB-640, 13 NRC 487 (1981), the Appeal Board adopted radon release values for use in the licensing proceedings. The Appeal Board also announced its intention to begin review of the associated health effects of such radon release values. Id. at 544-45.

On November 19, 1982, the Appeal Board issued ALAB-701 which ruled on the health effects issue and held that the environmental effects of these radon releases were insufficient to tip the NEPA balance against operating the facilities. Philadelphia Electric Co. (Peach Bottom Atomic Power Station) ALAB-701, 16 NRC 1517 (1982). Therein the Board noted that "(a)lthough the conclusions reached here are equally applicable to the proceedings before us in which the radon issue was not placed in controversy (including Cherokee) we will abide the event of possible Commission review of this decision before taking formal action in those proceedings." ALAB-701 at 1529, n.23.

The Commission is currently holding in abeyance its decision to review ALAB-701 pending its determination whether to initiate a further rulemaking to amend the mill tailings regulations and, if such a rulemaking is initiated, pending its conclusion. In the interim, the Commission has directed Licensing Boards to continue to defer consideration

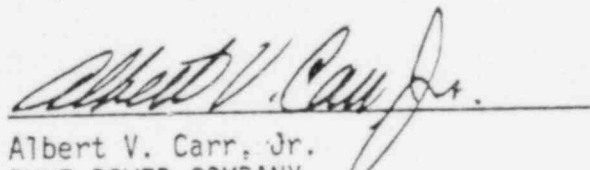
of radon issues and to issue appropriately conditioned licenses pending decision on the review of ALAB-701. See Philadelphia Electric Co. (Peach Bottom Atomic Power Station) CLI-83-14 17 NRC \_\_\_\_\_, (slip op. at 10-11) (May 27, 1983).

III

Therefore, there is no matter currently pending before the Commission involving the Cherokee facility. There is no matter currently pending before a Licensing Board concerning Cherokee, because ALAB-482 affirmed the Licensing Board's Cherokee decisions except as to the radon issue (as to which the Appeal Board retained jurisdiction). See Cherokee, ALAB-482, 7 NRC at 981. However, as long as the Appeal Board continues to abide the event of possible Commission review of the contested cases, uncontested cases such as Cherokee remain pending before the Appeal Board on the radon issue.

Accordingly, Duke now moves on grounds of mootness to terminate the appellate jurisdiction retained in Cherokee ALAB-482, and Peach Bottom, ALAB-540, with regard to any possible radon issue in Cherokee, and to dismiss this proceeding without prejudice. See Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2) ALAB-723, 17 NRC \_\_\_\_\_ (slip op. at 2-3) (April 14, 1983).

Respectfully submitted,

  
Albert V. Carr, Jr.  
DUKE POWER COMPANY  
P. O. Box 33189  
Charlotte, North Carolina 28242

J. Michael McGarry, III  
DEBEVOISE & LIBERMAN  
1200 Seventeenth Street, N.W.  
Washington, D.C. 20036

Counsel for Duke Power Company, et. al.

October 4, 1983

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'83 OCT -6 A11:29

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of

DUKE POWER COMPANY

(Cherokee Nuclear Station,  
Units 1, 2, and 3)

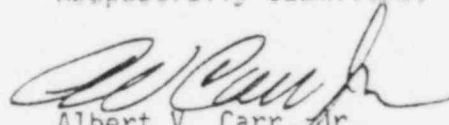
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Docket Nos. STN 50-491  
STN 50-492  
STN 50-493

NOTICE OF APPEARANCE

Notice is hereby given that the undersigned attorney herewith enters an appearance in the above-captioned proceeding. In accordance with 10 CFR § 2.713(a), the following information is provided:

Name:	Albert V. Carr, Jr.
Address:	P. O. Box 33189 422 South Church Street Charlotte, North Carolina 28242
Telephone Number:	704/373-2570
Admissions:	Supreme Court of Virginia District of Columbia Court of Appeals Supreme Court of North Carolina
Name of Party:	Duke Power Company

Respectfully submitted,

  
Albert V. Carr, Jr.  
Attorney for Duke Power Company

Dated: October 4, 1983

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKETED  
USNRC

'83 OCT -6 A11:29

In the Matter of  
  
DUKE POWER COMPANY  
  
(Cherokee Nuclear Station,  
Units 1, 2, and 3)

Docket Nos. STN 50-491  
STN 50-492  
STN 50-493

CERTIFICATE OF SERVICE

I hereby certify that copies of "Motion of Duke Power Company To Terminate Appellate Jurisdiction" and "Notice of Appearance of Albert V. Carr, Jr.", dated October 4, 1983, in the captioned matter, have been served upon the following by deposit in the United States mail this 4th day of October, 1983:

Allen S. Rosenthal, Chairman  
Atomic Safety and Licensing  
Appeal Board  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

James W. Burch  
Director  
Nuclear Advisory Council  
2600 Bull Street  
Columbia, South Carolina 29201

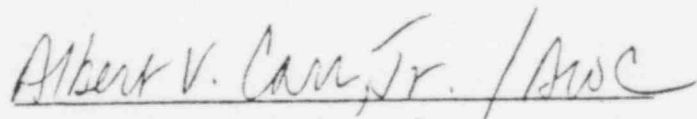
Dr. John H. Buch  
Atomic Safety and Licensing  
Appeal Board  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Chairman  
Atomic Safety and Licensing  
Board Panel  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Charles A. Barth, Esq.  
Counsel for NRC Regulatory Staff  
Office of the Executive Legal Director  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Mr. Scott Stuckey  
Docketing & Service Section  
Office of the Secretary  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

M. Richbourg Roberson, Esq.  
Staff Attorney  
Attorney General's Office  
Post Office Box 11549  
Columbia, South Carolina 29211

  
Albert V. Carr, Jr.

DUKE POWER COMPANY

ELECTRIC CENTER, BOX 33189, CHARLOTTE, N. C. 28242

DOCKETED  
USNRC

L. C. DAIL  
VICE PRESIDENT  
DESIGN ENGINEERING

'83 OCT -6 AM 11:30

September 21, 1983

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

Re: Cherokee Nuclear Station  
Docket No. 50-491  
Files: P81-1412.06, CK-1472.00

On April 29, 1983 Duke Power Company's Board of Directors announced cancellation of Cherokee Unit 1. Cherokee Units 2 and 3 were cancelled on November 2, 1982. Load forecasts based on current and predicted economic conditions indicated that Unit 1 would not be needed until 1995. To stretch construction out to that date would increase the total cost of the unit appreciably due to accumulating interest charges.

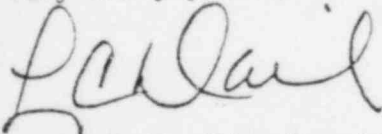
The Board of Directors' reassessment of Cherokee Unit 1 led to the following conclusions which necessitate cancellation:

1. Unit 1's generating capacity can probably be provided more economically by other types of generation.
2. Duke's existing coal and nuclear units will probably cover baseload requirements for the balance of this century.

We hereby tender to you Construction Permit numbers CPPR-167, CPPR-168, and CPPR-169 for Cherokee Units 1, 2, and 3. We request that you delete these dockets.

We have enclosed six (6) copies of Duke Power Company's stabilization plan for the Cherokee site.

Very truly yours,



L. C. Dail, Vice President  
Design Engineering Department

JHM/pam

Enclosure

cc: Darrell G. Eisenhut  
Division of Licensing  
USNRC  
Washington, DC 20555

Dr. John H. Buck  
Atomic Safety & Licensing  
Appeal Panel  
USNRC  
Washington, DC 20555

Dr. Donald P. DeSylva  
School of Marine and Atmospheric  
Science  
University of Miami  
Miami, FL 33149

Dr. Walter H. Jordan  
881 West Outer Drive  
Oak Ridge, TN 37830

Annette L. Vietti  
USNRC  
Washington, DC 20555

Charles Barth, Esq.  
USNRC  
Washington, DC 20555

Atomic Safety & Licensing  
Appeal Panel  
USNRC  
Washington, DC 20555

Atomic Safety & Licensing  
Board Panel  
USNRC  
Washington, DC 20555

Office of the Secretary  
USNRC  
Washington, DC 20555

Ronald L. Ballard  
Environmental Engineering Branch  
USNRC  
Washington, DC 20555

bcc: A. V. Carr  
N. A. Rutherford  
S. B. Hager  
S. K. Blackley  
C. J. Wylie

R. B. Priory  
W. L. Porter  
D. E. Lennon  
W. R. Stimart  
D. H. Denton, Jr.





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

December 30, 1977

Docket Nos. STN 50-491  
STN 50-492  
STN 50-493

Duke Power Company  
Attn: Mr. W. H. Owen, Vice President  
Design Engineering  
P. O. Box 2178  
Charlotte, North Carolina 28242

Gentlemen:

SUBJECT: ISSUANCE OF CONSTRUCTION PERMITS FOR CHEROKEE NUCLEAR STATION

Pursuant to the Partial Initial Decision dated May 21, 1976, Amendment of Partial Initial Decision dated March 17, 1977, Supplemental Partial Initial Decision dated July 26, 1977, Order dated June 23, 1976 (unpublished) and Partial Initial Decision dated December 30, 1977, by the Atomic Safety and Licensing Board, the Nuclear Regulatory Commission has issued Construction Permits Nos. CPPR-167, CPPR-168 and CPPR-169 to Duke Power Company. These permits authorize the construction of the Cherokee Nuclear Station, Units 1, 2 and 3, to be located in Cherokee County, South Carolina.

Copies of the construction permits, and a related notice which has been forwarded to the Office of the Federal Register for publication, are enclosed.

Sincerely,

A handwritten signature in cursive script, reading "Roger S. Boyd, for".

Roger S. Boyd, Director  
Division of Project Management  
Office of Nuclear Reactor Regulation

Enclosures:

1. Construction Permits  
CPPR-167, 168, and 169
2. Federal Register Notice

ccs w/enclosures:  
See page 2



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

DUKE POWER COMPANY

DOCKET NO. STN 50-491

CHEROKEE NUCLEAR STATION, UNIT 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-167

1. The Nuclear Regulatory Commission (the Commission) having found that:
  - A. The application for construction permits complies with the requirements of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission; there is reasonable assurance that the activities authorized by the permit will be conducted in compliance with the rules and regulations of the Commission; and all required notifications to other agencies or bodies have been duly made;
  - B. The Duke Power Company (the applicant) has described the proposed design of the Cherokee Nuclear Station, Unit 1 (the facility), including, but not limited to, the principal architectural and engineering criteria for the design, and has identified the major features or components incorporated therein for the protection of the health and safety of the public;
  - C. Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the Final Safety Analysis Report;
  - D. Safety features or components, if any, which require research and development have been described by the applicant and the applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components;



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

DUKE POWER COMPANY

DOCKET NO. STN 50-492

CHEROKEE NUCLEAR STATION, UNIT 2

CONSTRUCTION PERMIT

Construction Permit No. CPPR-168

1. The Nuclear Regulatory Commission (the Commission) having found that:
  - A. The application for construction permits complies with the requirements of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission; there is reasonable assurance that the activities authorized by the permit will be conducted in compliance with the rules and regulations of the Commission; and all required notifications to other agencies or bodies have been duly made;
  - B. The Duke Power Company (the applicant) has described the proposed design of the Cherokee Nuclear Station, Unit 2 (the facility), including, but not limited to, the principal architectural and engineering criteria for the design, and has identified the major features or components incorporated therein for the protection of the health and safety of the public;
  - C. Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the Final Safety Analysis Report;
  - D. Safety features or components, if any, which require research and development have been described by the applicant and the applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components;



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

DUKE POWER COMPANY

DOCKET NO. STN 50-493

CHEROKEE NUCLEAR STATION, UNIT 3

CONSTRUCTION PERMIT

Construction Permit No. CPPR-169

1. The Nuclear Regulatory Commission (the Commission) having found that:
  - A. The application for construction permits complies with the requirements of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission; there is reasonable assurance that the activities authorized by the permit will be conducted in compliance with the rules and regulations of the Commission; and all required notifications to other agencies or bodies have been duly made;
  - B. The Duke Power Company (the applicant) has described the proposed design of the Cherokee Nuclear Station, Unit 3 (the facility), including, but not limited to, the principal architectural and engineering criteria for the design, and has identified the major features or components incorporated therein for the protection of the health and safety of the public;
  - C. Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the Final Safety Analysis Report;
  - D. Safety features or components, if any, which require research and development have been described by the applicant and the applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components;

- E. On the basis of the foregoing, there is reasonable assurance that (i) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of construction of the proposed facility, and (ii) taking into consideration the site criteria contained in 10 CFR Part 100, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public;
  - F. The applicant is technically qualified to design and construct the proposed facility;
  - G. The applicant is financially qualified to design and construct the proposed facility;
  - H. The issuance of a permit for the construction of the facility will not be inimical to the common defense and security or to the health and safety of the public; and
  - I. After weighing the environmental, economic, technical and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of a construction permit subject to the conditions for protection of the environment set forth herein is in accordance with Appendix D to 10 CFR Part 50 (currently known as 10 CFR Part 51) of the Commission's regulations and all applicable requirements have been satisfied.
2. Pursuant to Section 103 of the Atomic Energy Act of 1954, as amended (the Act), and Title 10, Chapter I, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities", and pursuant to the Initial Decisions of the Atomic Safety and Licensing Board dated May 21, 1976, March 17, 1977, July 26, 1977, and December 30, 1977, and unpublished Order dated June 23, 1976, the Commission hereby issues a construction permit to the applicant for a utilization facility designed to operate at a core thermal power of 3800 megawatts as described in the application and amendments thereto (the application) filed in this matter by the applicant and as more fully described in the evidence received at the public hearing upon that application. The facility, known as the Cherokee Nuclear Station, Unit 1, will be located on the applicant's site in eastern Cherokee County, South Carolina.
3. This permit shall be deemed to contain and be subject to the conditions specified in Section 50.54 and 50.55, of said regulations; is subject to all applicable provisions of the Act, and rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the conditions specified or incorporated below:

- A. The earliest date for the completion of the facility is February 28, 1983, and the latest date for completion is May 31, 1984.
- B. The facility shall be constructed and located at the site as described in the application, in Cherokee County, South Carolina.
- C. This construction permit authorizes the applicant to construct the facility described in the application, as amended, and the hearing record, in accordance with the principal architectural and engineering criteria and commitments set forth therein.
- D. This permit is subject to the following conditions for the protection of the environment:
- (1) The applicant shall take the necessary mitigating actions, including those summarized in Section 4.5 of the Final Environmental Statement, during construction of the facility, associated transmission lines, and railroad spur to avoid unnecessary adverse environmental impacts from construction activities.
  - (2) The applicant shall submit a detailed erosion control plan to be approved by the Commission prior to initiation of any construction activities. The plan must consider the concerns of the Commission's staff as set forth in the Final Environmental Statement and identify those areas where serious erosion could occur as a result of clearing and construction. The plan must describe in detail, for each of these areas separately, the actions that will be taken to control erosion.
  - (3) Total residual chlorine shall not exceed 0.2 mg/l at the point of discharge of the cooling tower blowdown.
  - (4) Before engaging in a construction activity not evaluated by the Commission, the applicant will prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated, or that is significantly greater than that evaluated in the Final Environmental Statement, the applicant shall provide a written evaluation of such activities and obtain prior approval of the Director of Project Management for the activities.

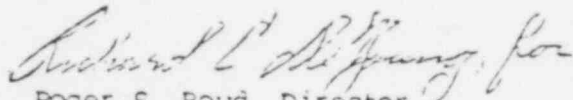


- (5) The applicant shall establish a control program which shall include written procedures and instructions to control all construction activities as prescribed herein and shall provide for periodic management audits to determine the adequacy of implementation of environmental conditions. The applicant shall maintain sufficient records to furnish evidence of compliance with all the environmental conditions in the Final Environmental Statement.
  - (6) If unexpected harmful effects or evidence of serious damage are detected during facility construction, the applicant shall provide to the staff an acceptable analysis of the problem and a plan of action to eliminate or significantly reduce the harmful effects or damage.
  - (7) The applicant shall not remove any major components of the radwaste treatment system without replacing them with components to maintain equivalent overall system performance capability. The final design must be found acceptable by the Commission prior to issuance of an operating license.
  - (8) The applicant shall preserve approximately 10 acres of the 17.2 acre mountain-laurel hardwood stand which is the applicant's proposed scheme as described in the affidavit of L.C. Dail, dated December 8, 1976 (applicant's Exhibit 9 in the hearing record).
  - (9) The applicant shall maintain a flow of water through the Ninety-Nine Islands Dam immediately upstream of the Cherokee nuclear blowdown discharge so that the total residual chlorine concentration in the river after mixing will never be greater than 0.04 mg/l.
- E. In accordance with the requirements imposed by the October 8, 1976 Order of the United States Court of Appeals, for the District of Columbia Circuit in Natural Resources Defense Council v. Nuclear Regulatory Commission, No. 74-1385 and 74-1586 (cert. granted sub nom Vermont Yankee Nuclear Power Corp. vs. Natural Resources Defense Council, 45 U.S.L.W. 3570, February 22, 1977) that the Nuclear Regulatory Commission "shall make any licenses granted between July 21, 1976, and such time when the mandate is issued subject to the outcome of such proceedings herein", the construction permit issued herein shall be subject to the outcome of such proceedings.
4. This permit is subject to the limitation that a license authorizing operation of the facility will not be issued by the Commission unless

(a) the applicant submits to the Commission the complete Final Safety Analysis Report, portions of which may be submitted and evaluated from time to time; (b) the Commission finds that the final design provides reasonable assurance that the health and safety of the public will not be endangered by the operation of the facility in accordance with procedures approved by it in connection with the issuance of said license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements are satisfied; and (d) the applicant submits proof of financial protection and executes an indemnity agreement as required by Section 170 of the Act.

5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

FOR THE NUCLEAR REGULATORY COMMISSION



Roger S. Boyd, Director  
Division of Project Management  
Office of Nuclear Reactor Regulation

Date of Issuance:

December 30, 1977



UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. STN 50-491, STN 50-492, STN 50-493

DUKE POWER COMPANY

CHEROKEE NUCLEAR STATION, UNITS 1, 2 AND 3

Notice is hereby given that, pursuant to the Partial Initial Decision dated May 21, 1976, Amendment of Partial Initial Decision dated March 17, 1977, Supplemental Partial Initial Decision dated July 26, 1977, unpublished Order dated June 23, 1976, and Partial Initial Decision dated December 30, 1977, of the Atomic Safety and Licensing Board, the Nuclear Regulatory Commission (the Commission) has issued Construction Permits Nos. CPPR-167, CPPR-168, CPPR-169 to Duke Power Company for construction of three pressurized water nuclear reactors at the applicant's site in eastern Cherokee County, South Carolina.

The proposed facility is known as the Cherokee Nuclear Station, Units 1, 2 and 3. Each unit is designed for a rated power of 3500 megawatts thermal with a net electrical output of 1280 megawatts.

The Initial Decisions are subject to review by an Atomic Safety and Licensing Appeal Board prior to their becoming final. Any decision or action taken by an Atomic Safety and Licensing Appeal Board in connection with these Decisions may be reviewed by the Commission.

The Commission has made appropriate findings as required by the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the

construction permits. The application for the construction permits complies with the standards and requirements of the Act and the Commission's rules and regulations.

Each construction permit is effective on the date of issuance. The earliest date for completion of Unit 1 is February 28, 1983, and the latest date for completion is May 31, 1984. The earliest date for completion of Unit 2 is August 31, 1985, and the latest date for completion is November 30, 1986. The earliest date for completion of Unit 3 is February 29, 1988, and the latest date for completion is May 31, 1989. The permits shall expire on the latest date for completion of each unit.

A copy of (1) the Initial Decisions dated May 21, 1976, March 17, 1977, July 26, 1977, and December 30, 1977; (2) Construction Permits Nos. CPPR-167, CPPR-168, and CPPR-169, (3) the report of the Advisory Committee on Reactor Safeguards dated April 14, 1977; (4) the Office Nuclear Reactor Regulation's Safety Evaluation Report (NUREG-0189) dated March 1977, and Supplement 1 dated July 1977; (5) the Preliminary Safety Analysis Report and amendments thereto; (6) the applicant's Environmental Report dated June 17, 1974 and amendments thereto; (7) the Draft Environmental Statement dated March 1975; (8) the Final Environmental Statement (NUREG-75/089) dated October 1975, are available for public inspection at the Commission's Public Document Room at 1717 H Street, N. W., Washington, D. C. 20555, and at the Cherokee County Library, 300 E. Rutledge Avenue, Gaffney, South Carolina 29340. A copy of the construction permits may be obtained upon request addressed to the

U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention:  
Director, Division of Project Management.

Copies of the Safety Evaluation Report and supplement, and the Final  
Environmental Statement may be purchased, at current rates, from the  
National Technical Information Service, Department of Commerce, 5285  
Port Royal Road, Springfield, Virginia 22161.

Dated at Bethesda, Maryland, this 30th day of December 1977.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

Harley Silver, Acting Chief  
Light Water Reactors Branch 4  
Division of Project Management

DUKE POWER COMPANY

Cancellation of  
The Cherokee Nuclear Station

August 1983

## TABLE OF CONTENTS

### PAGE NO.

1.0	INTRODUCTION	
1.1	Project Background	1
1.2	Scope of Plan	1
1.3	Limitations of Plan	1
2.0	SITE STABILIZATION PLAN	
2.1	State of Completion at Cancellation	2
2.2	Existing Site Conditions	3
2.2.1	Excavations	3
2.2.2	Storage Facilities	4
2.2.3	Dams/Ponds	4
2.2.4	Plant Physical Facilities	4
2.2.5	Transmission Corridors	5
2.2.6	Transportation Facilities	5
2.3	Site Stabilization Activities	
2.3.1	Excavations	5
2.3.2	Storage Facilities	6
2.3.3	Dams/Ponds	6
2.3.4	Plant Physical Facilities	6
2.3.5	Transmission Corridors	7
2.3.6	Transportation Facilities	7

Cancellation of  
The Cherokee Nuclear Station

1.0 INTRODUCTION

1.1 PROJECT BACKGROUND

The Cherokee Nuclear Station site is located near Gaffney in north central South Carolina, approximately 40 miles southwest of Charlotte, N.C., and 21 miles east of Spartanburg, S.C. Duke Power Company announced plans for the three unit Cherokee Nuclear Station on February 26, 1974. After receiving limited work authorization from the Nuclear Regulatory Commission, on May 28, 1976, Duke broke ground on July 1, 1976. The Construction Permits were granted December 30, 1977, and the first concrete pour was made on February 16, 1978.

After several delays in the construction schedule, the Cherokee Nuclear Station was formally cancelled by decision of the Board of Directors on April 29, 1983. Units 2 & 3 were previously cancelled in 1982.

1.2 SCOPE OF PLAN

This plan outlines the existing condition of the Cherokee site and the activities necessary to stabilize the site with respect to erosive forces and unauthorized access. It should not be construed as a plan to restore the site to preconstruction conditions. The plan provides for stabilization of the site for the short-term and control of unauthorized access and prevention of unauthorized use. The plan will remain in effect until the most appropriate long-term use of the site is determined, at which time it will be incorporated into that use.

1.3 LIMITATIONS OF PLAN

At present many activities associated with original construction and licensing

of the Cherokee Nuclear Station are being conducted under several permits issued by State and Federal regulatory agencies. In conjunction with plant cancellation, Duke is now in the process of reviewing the need for these permits and whether action to modify, renew, or cancel will be necessary.

Although detailed descriptions of these activities are not addressed herein, examples of the permits within this category include the following:

NPDES Permit issued by S.C. Department of Health and Environmental Control (SC-DHEC).

Section 404 Permit issued by Corps of Engineers.

Section 10 Permit issued by S. C. Water Resources Commission.

Air Quality Permit issued by SCDHEC.

FAR-Part 77 Permit issued by Federal Aviation Administration.

Site monitoring under Duke's Control Program to Limit Adverse Environmental Effects During Construction is also under review. Commitments agreed upon with the Nuclear Regulatory Commission and the Environmental Protection Agency under this program will be modified as necessary to provide a complete stabilization of all site facilities.

## 2.0 SITE STABILIZATION PLAN

### 2.1 STATE OF COMPLETION AT CANCELLATION

Construction activities for Unit 1, including facilities considered common to all three units, were 17.8 percent complete just prior to the cancellation of Units 2 and 3. Except for the partially completed powerhouse excavations, progress on Units 2 and 3 was essentially zero. The following listing indicates the approximate percentage of structural concrete work completed for the major structures for Unit 1 and for common facilities.

<u>Structure</u>	<u>Unit 1</u>	<u>Common</u> <sup>*</sup>
Reactor Building	53%	
Auxiliary Building	24%	
Turbine Building	73%	
Condenser Cooling Water Pump Structure	95%	
Service Building		51%
Nuclear Service Water Pump Structures		100%
Makeup Intake Structure		100%
Nuclear Service Water Cooling Towers		64%
Nuclear Service Water Spillway		100%
Nuclear Service Water Cable Tunnels		86%
Yard Valve Structures		2%

\*Facilities considered common to all three units before cancellation of Units 2 & 3.

Some equipment has been installed in the plant buildings. This equipment will be removed at Duke's option. Also, buried piping and electrical conduits and trenches, either permanent or temporary, will have ends sealed and be left in place, unless they can be economically salvaged.

## 2.2 EXISTING SITE CONDITIONS

### 2.2.1 EXCAVATIONS

Approximately one-half of the land surface of the total 2200 acre plant site is comprised of graded yards or building site excavations, borrow areas, spoil areas, and earth embankments where the original terrain was physically modified in varying degrees during plant construction operations in the period 1976 to 1980.



### 2.2.2 STORAGE FACILITIES

Approximately 200 acres of the site is currently being used as open storage areas for construction materials. These storage areas generally have been surfaced with gravel. Additionally, two - 200' x 400' and two - 200' x 200' warehouses are used for material and equipment storage. All are equipped with operational fire protection systems. The two larger warehouses are fully heated, and one is also partially cooled.

### 2.2.3 DAMS/PONDS

Ponds impounded by dams cover approximately 300 acres of the site. Additionally, runoff and groundwater has created ponds in several major excavations. All of the permanent water-retaining earth structures are essentially complete.

### 2.2.4 PLANT PHYSICAL FACILITIES

The Cherokee site facilities include several partially completed permanent warehouses, and many other temporary construction buildings and facilities already in place and useable. All construction buildings are serviced with utilities.

Six wells of drinking water quality, two temporary electrical substations, approximately 700 acres of graded and graveled parking and storage areas, a permanent fire protection main, and a package sewage treatment system are among the functional on-site facilities.

The CCW Cooling Tower yards are graded and graveled and most of the large diameter underground cooling water pipe located between the tower yards and the turbine buildings is installed.

A permanent aerated lagoon sewage treatment system is partially completed. Some permanent underground storm drainage piping, primarily in the Unit 1 yard area, is in place.

#### 2.2.5 TRANSMISSION CORRIDORS

Transmission corridors associated with the planned high-voltage transmission lines from plant switch yards are sufficiently cleared to accommodate construction of tower structures from the system to the site.

#### 2.2.6 TRANSPORTATION FACILITIES

A newly constructed railroad spur provides rail access to the site. A recently improved paved state highway provides good vehicle access from the major interstate highway, I-85, at Gaffney. Numerous ungraveled, graveled and paved roads provide additional access to areas within the site.

### 2.3 SITE STABILIZATION ACTIVITIES

#### 2.3.1 EXCAVATIONS

Backfill will be placed in any unstable excavated areas as required and additional grading will be performed to provide drainage for ponded areas if their existence is considered an environmental problem. Grass cover will be established in all areas except gravel surfaced areas, concrete slabs, and buildings. Areas excavated to rock are considered stable and will not require further treatment.