

Docket Nos. 50-438  
and 50-439 ✓

DEC 24 1974

Distribution:

Dockets (2)  
AEC PDR  
Local PDR  
LWR 2-3 Rdg  
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ACRS (16)

NDuba  
VAMoore  
DDavis  
WMiller, DR:OA  
SReed, EP  
GDittman, EP  
DMuller, EP  
W.Regan, EP

Tennessee Valley Authority  
Attn: Mr. James E. Watson  
Manager of Power  
818 Power Building  
Chattanooga, Tennessee 37401

Gentlemen:

The Atomic Energy Commission has issued Construction Permits Nos. CPPR-122 and CPPR-123 to the Tennessee Valley Authority authorizing construction of Bellefonte Nuclear Plant, Units 1 and 2, two pressurized water reactors. The construction permits have been issued pursuant to an Initial Decision by the Atomic Safety and Licensing Board.

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

Sincerely,

Original Signed by

A. Schwencer, Chief  
Light Water Reactors Branch 2-3  
Directorate of Licensing

Enclosures:

1. Construction Permits  
Nos. CPPR-122 and CPPR-123
2. Federal Register Notice
3. Initial Decision - *will be provided by SEC*

ccs: See next page

OGC  
*W.D. Paton*  
12/23/74

OGC(Antitrust)  
*[Signature]*  
12/25/74

LG

OFFICE	x7886/LWR 2-3	x7886/LWR 2-3	x7886/LWR 2-3	x6965/AD:EP	x7703/AD/LWR2	x737/AD:RP
SURNAME	EGoulbourne:rm	DDavis	ASchwencer	DMuller	VAMoore	AGiambusso
DATE	11/25/74	11/26/74	11/26/74	12/10/74	12/11/74	12/14/74

ccs w/encl:

DEC 24 1974

William E. Garner, Esquire  
Route 4, Box 354  
Scottsboro, Alabama 35768

Alabama Development Office  
State Office Building  
Montgomery, Alabama 36104

Top of Alabama Regional Council  
of Governments  
P. O. Box 308  
City Hall - 6th Floor  
Huntsville, Alabama 35801

Honorable John Reid  
Mayor of the City of Scottsboro  
City Hall  
Scottsboro, Alabama 35768

Honorable Eugene Dutton  
Mayor of the City of Hollywood  
City Hall  
Hollywood, Alabama

Mr. John Robins  
Office of Planning & Budget  
Room 615C  
270 Washington Street, S. W.  
Atlanta, Georgia 30334

Mr. Walter Lambert, Director  
Office of Urban & Federal Affairs  
321 Seventh Avenue, North  
Nashville, Tennessee 37219

Mr. J. L. Church, Jr., Director  
Bureau of Environmental Health Services  
Tennessee Department of Public Health  
Cordell Hull Building  
Nashville, Tennessee 37219

Office of Urban & Federal Affairs  
Suite 1025  
Andrew Jackson State Office Building  
Nashville, Tennessee 37219

Robert H. Marquis, Esquire  
David G. Powell, Esquire  
Tennessee Valley Authority  
New Sprankle Building  
Knoxville, Tennessee 37902

Lewis E. Wallace, Esquire  
Alvin H. Gutterman, Esquire  
Division of Law  
Tennessee Valley Authority  
New Sprankle Building  
Knoxville, Tennessee 37902

Ira L. Myers, M.D.  
State Health Officer  
State of Alabama Department  
of Public Health  
State Office Building  
Montgomery, Alabama 36104

Mr. Bruce Blanchard, Director  
Office of Environmental Projects Review  
Department of Interior - Rm. 5321  
18th & C Streets, N. W.  
Washington, D. C. 20240

Mr. Sheldon Myers  
ATTN: Jack Anderson  
Office of Federal Activities  
Environmental Protection Agency  
Rm. W-541 Waterside Mall  
401 M Street, S. W.  
Washington, D. C. 20460

U. S. Army Engineering District,  
Nashville  
P. O. Box 1070  
Nashville, Tennessee 37202

OFFICE ➤						
SURNAME ➤						
DATE ➤						

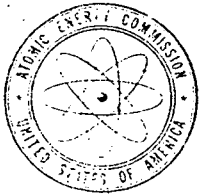
DEC 4 1974

ccs w/encl: (cont'd)

Mr. James W. Warr  
Alabama Water Improvement Commission  
749 State Office Building  
Montgomery, Alabama 36104

Mr. Charles B. Kelley  
Department of Conservation  
& Natural Resources  
Division of Game & Fish  
84 North Union Street  
Montgomery, Alabama 36104

OFFICE >						
SURNAME >						
DATE >						



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

TENNESSEE VALLEY AUTHORITY  
DOCKET NO. 50-438  
BELLEFONTE NUCLEAR PLANT, UNIT 1  
CONSTRUCTION PERMIT

Construction Permit No. CPPR-122

1. The Atomic Energy Commission (the Commission) having found that:
  - A. The application for construction permit 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 Tennessee Valley Authority (the applicant) has described the proposed design of the Bellefonte Nuclear Plant, 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;
  - 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 10 CFR Part 50, Appendix D 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 Decision of the Atomic Safety and Licensing Board, dated December 23, 1974, the Atomic Energy Commission (the Commission) hereby issues a construction permit to the applicant for a utilization facility designed to operate at 3600 megawatts thermal 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 the application. The facility, known as the Bellefonte Nuclear Plant, Unit 1 will be located on the applicant's site in Jackson County, Alabama.
3. This permit shall be deemed to contain and be subject to the conditions specified in Sections 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 June 1, 1979, and the latest date for completion is December 1, 1979.
  - B. The facility shall be constructed and located at the site as described in the application, in Jackson County, Alabama.
  - C. This construction permit authorizes the applicant to construct the facility described in the application and the hearing record, in accordance with the principal architectural and

engineering criteria and environmental protection commitments set forth therein.

D. This facility is subject to the following conditions for the protection of the environment:

- (1) An approved sampling program, as outlined in Section 5.4.2.5 and 6.2.1.1 of the AEC staff's Final Environmental Statement (SFES) will be implemented to obtain data necessary for assessment of the significance of the loss of ichthyoplankton through entrainment in the proposed intake.
- (2) The data obtained in the program specified in (1) above shall be submitted to the staff for review on a continuing basis and shall form the basis for a final decision on the acceptability of the proposed intake. The results will be subjected to thorough evaluation and a decision on the intake acceptability will be made on the basis of a cost-benefit analysis which will include both projected losses of fisheries resources on the entire reservoir and real and projected costs for the plant.
- (3) The applicant shall not use the broadcast application of herbicides on the right-of-way covered under Step One (Section 3.3, SFES) of the transmission line construction plan. (Section 5.4.1 and Appendix B, SFES).

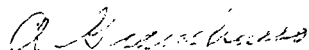
The applicant shall conduct studies which will assess the impacts of various alternative methods of transmission line construction and maintenance, and prior to any construction of Steps Two and Three (Section 3.3 SFES), the applicant shall submit (1) for staff evaluation the results of these studies and (2) an updated version of its proposed clearing and maintenance methods for staff approval. This submittal should include analysis of cost experience factors as well as environmental impacts such as the effects on vegetation, wildlife and soil stability. (Sections 4.1.2 and 9.2.4 SFES)

- (4) Prior to initiating construction of the discharge facility, the applicant shall provide the results of thermal-hydraulic analytical studies and plans for physical modelling experiments to be conducted in support of the final design and location of the plant cooling water discharge. (Sections 5.4.2.3.1 and 9.2.5 SFES)

- (5) The applicant shall take the necessary mitigating actions, including those summarized in Section 4.4, SFES, during construction of the plant and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities.
  - (6) A control program shall be established by the applicant to provide for a periodic review of all construction activities to assure that those activities conform to the environmental conditions set forth in the construction permit.
  - (7) Before engaging in a construction activity which may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than that evaluated in the SFES, the applicant shall provide written notification to the Director of Licensing.
  - (8) The applicant may develop either, but not both, of the two alternative access routes to the plant as the permanent plant access road; provided that approximately 500 acres of land located on the northeast tip of Bellefonte peninsula will be developed as a "generally dispersed recreation area" as defined in Tennessee Valley Authority's Recreation Plan, Volume 1, Methodology (1973); and that the proposed recreation area will be developed consistent with maximum "peak hour recreation visits" of approximately 800 visits within a two mile radius of the plant for the life of the facility.
  - (9) In the event that it is determined by the Environmental Protection Agency (EPA) that area rainfall runoff limitations are applicable to plants under construction, the applicant shall comply with the limitations for area rainfall runoff established by EPA for steam electric power generating plants or the provisions of an appropriate National Pollutant Discharge Elimination System (NPDES) Permit.
- E. In view of the fact that the Attorney General has not recommended an antitrust hearing in this matter, that no antitrust issues have been raised by another in a manner according with the Commission's Rules of Practice, and that no finding has been made that an antitrust hearing is otherwise required (10 CFR Part 2, Section 2.104(d)), antitrust review of the application for this construction permit under Section 105c of the Atomic Energy Act of 1954, as amended, has been completed and a hearing thereon determined to be unnecessary.

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 have been 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 ATOMIC ENERGY COMMISSION

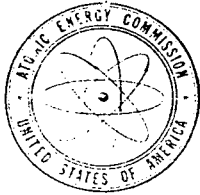


A. Giambusso, Deputy Director  
for Reactor Projects  
Directorate of Licensing

Date of Issuance:

DEC 24 1974





UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

TENNESSEE VALLEY AUTHORITY  
DOCKET NO. 50-439  
BELLEFONTE NUCLEAR PLANT, UNIT 2  
CONSTRUCTION PERMIT

Construction Permit No. CPPR-123

1. The Atomic Energy Commission (the Commission) having found that:
  - A. The application for construction permit 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 Tennessee Valley Authority (the applicant) has described the proposed design of the Bellefonte Nuclear Plant, 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;
  - 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 10 CFR Part 50, Appendix D 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 Decision of the Atomic Safety and Licensing Board, dated December 23, 1974, the Atomic Energy Commission (the Commission) hereby issues a construction permit to the applicant for a utilization facility designed to operate at 3600 megawatts thermal 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 the application. The facility, known as the Bellefonte Nuclear Plant, Unit 2 will be located on the applicant's site in Jackson County, Alabama.
3. This permit shall be deemed to contain and be subject to the conditions specified in Sections 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 March 1, 1980 and the latest date for completion is September 1, 1980.
  - B. The facility shall be constructed and located at the site as described in the application, in Jackson County, Alabama.
  - C. This construction permit authorizes the applicant to construct the facility described in the application and the hearing record, in accordance with the principal architectural and

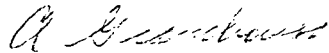
engineering criteria and environmental protection commitments set forth therein.

- D. This facility is subject to the following conditions for the protection of the environment:
- (1) An approved sampling program, as outlined in Section 5.4.2.5 and 6.2.1.1 of the AEC staff's Final Environmental Statement (SFES) will be implemented to obtain data necessary for assessment of the significance of the loss of ichthyoplankton through entrainment in the proposed intake.
  - (2) The data obtained in the program specified in (1) above shall be submitted to the staff for review on a continuing basis and shall form the basis for a final decision on the acceptability of the proposed intake. The results will be subjected to thorough evaluation and a decision on the intake acceptability will be made on the basis of a cost-benefit analysis which will include both projected losses of fisheries resources on the entire reservoir and real and projected costs for the plant.
  - (3) The applicant shall not use the broadcast application of herbicides on the right-of-way covered under Step One (Section 3.3, SFES) of the transmission line construction plan. (Section 5.4.1 and Appendix B, SFES).  
  
The applicant shall conduct studies which will assess the impacts of various alternative methods of transmission line construction and maintenance, and prior to any construction of Steps Two and Three (Section 3.3 SFES), the applicant shall submit (1) for staff evaluation the results of these studies and (2) an updated version of its proposed clearing and maintenance methods for staff approval. This submittal should include analysis of cost experience factors as well as environmental impacts such as the effects on vegetation, wildlife and soil stability. (Sections 4.1.2 and 9.2.4 SFES)
  - (4) Prior to initiating construction of the discharge facility, the applicant shall provide the results of thermal-hydraulic analytical studies and plans for physical modelling experiments to be conducted in support of the final design and location of the plant cooling water discharge. (Sections 5.4.2.3.1 and 9.2.5 SFES)

- (5) The applicant shall take the necessary mitigating actions, including those summarized in Section 4.4, SFES, during construction of the plant and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities.
  - (6) A control program shall be established by the applicant to provide for a periodic review of all construction activities to assure that those activities conform to the environmental conditions set forth in the construction permit.
  - (7) Before engaging in a construction activity which may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than that evaluated in the SFES, the applicant shall provide written notification to the Director of Licensing.
  - (8) The applicant may develop either, but not both, of the two alternative access routes to the plant as the permanent plant access road; provided that approximately 500 acres of land located on the northeast tip of Bellefonte peninsula will be developed as a "generally dispersed recreation area" as defined in Tennessee Valley Authority's Recreation Plan, Volume 1, Methodology (1973); and that the proposed recreation area will be developed consistent with maximum "peak hour recreation visits" of approximately 800 visits within a two mile radius of the plant for the life of the facility.
  - (9) In the event that it is determined by the Environmental Protection Agency (EPA) that area rainfall runoff limitations are applicable to plants under construction, the applicant shall comply with the limitations for area rainfall runoff established by EPA for steam electric power generating plants or the provisions of an appropriate National Pollutant Discharge Elimination System (NPDES) Permit.
- E. In view of the fact that the Attorney General has not recommended an antitrust hearing in this matter, that no antitrust issues have been raised by another in a manner according with the Commission's Rules of Practice, and that no finding has been made that an antitrust hearing is otherwise required (10 CFR Part 2, Section 2.104(d)), antitrust review of the application for this construction permit under Section 105c of the Atomic Energy Act of 1954, as amended, has been completed and a hearing thereon determined to be unnecessary.

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 have been 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 ATOMIC ENERGY COMMISSION



A. Giambusso, Deputy Director  
for Reactor Projects  
Directorate of Licensing

Date of Issuance:

**DEC 24 1974**

UNITED STATES ATOMIC ENERGY COMMISSION

DOCKET NOS. 50-438 AND 50-439

TENNESSEE VALLEY AUTHORITY

BELLEFONTE NUCLEAR PLANT, UNITS 1 AND 2

NOTICE OF ISSUANCE OF CONSTRUCTION PERMITS

Notice is hereby given that, pursuant to the Initial Decision of the Atomic Safety and Licensing Board, dated December 23, 1974, the Atomic Energy Commission (the Commission) has issued Construction Permits Nos. CPPR-122 and CPPR-123 to the Tennessee Valley Authority for construction of two pressurized water nuclear reactors at the applicant's site in Jackson County, Alabama. The proposed reactors, known as the Bellefonte Nuclear Plant, Units 1 and 2, are each designed for a rated power of 3600 megawatts thermal with a gross electrical output of approximately 1329 megawatts.

The Initial Decision is subject to review by an Atomic Safety and Licensing Appeal Board prior to its becoming final. Any decision or action taken by an Atomic Safety and Licensing Appeal Board in connection with the Initial Decision 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.

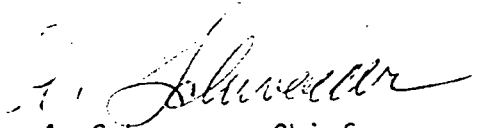
The construction permits are effective as of their date of issuance. The earliest date for the completion of Unit 1 is June 1, 1979, and the latest date for completion is December 1, 1979. The earliest date for the completion

of Unit 2 is March 1, 1980, and the latest date for completion is September 1, 1980. Each permit shall expire on the latest date for completion of the facility.

A copy of (1) the Initial Decision, dated Dec 23 1974 ; (2) Construction Permits Nos. CPPR-122 and CPPR-123; (3) the report of the Advisory Committee on Reactor Safeguards, dated July 16, 1974; (4) the Directorate of Licensing's Safety Evaluation, dated May 24, 1974 and the supplement thereto; (5) the Preliminary Safety Analysis Report and amendments thereto; (6) the applicant's Draft Environmental Statement, dated March 6, 1973 and supplements thereto; (7) the applicant's Final Environmental Statement, dated May 24, 1974; (8) the AEC's Draft Environmental Statement, dated February 1974; and (9) the AEC's Final Environmental Statement, dated June 1974, are available for public inspection at the Commission's Public Document Room at 1717 H Street, N. W., Washington, D. C. and the Scottsboro Public Library, 1002 South Broad Street, Scottsboro, Alabama 35768. Copies of the construction permits and the Safety Evaluation may be obtained upon request addressed to the U. S. Atomic Energy Commission, Washington, D. C. 20545, Attention: Deputy Director for Reactor Projects, Directorate of Licensing - Regulation.

Dated at Bethesda, Maryland, this 24th day of December , 1974.

FOR THE ATOMIC ENERGY COMMISSION

  
A. Schwencer, Chief  
Light Water Reactors Branch 2-3  
Directorate of Licensing