

# Docket File

SEP 25 1973

Docket No. 50-259

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

Gentlemen:

The Atomic Energy Commission has issued Amendment No. 1 to Facility Operating License No. DPR-33 (copy enclosed), which authorizes an increased amount of Sodium-24 and eliminates the restriction on the form of 1 millicurie of Americium-241. Additional Sodium-24 is required for efficiency testing of Unit 1 turbine by means of steam quality determinations. The 1 millicurie of Americium-241 is needed without restriction as to chemical or physical form to allow the material to be procured in liquid form, so individual sources which will be used in the calibration of the radiochemical laboratory counting instrumentation can be fabricated in the same manner as the samples whose activity is to be measured. You have described in a letter to the Commission dated September 17, 1973, the material's usage and control and have in force for the Browns Ferry Nuclear Plant, Standard Practice Number 8, entitled "Radioactive Byproduct Materials," which contains procedures and authorizations regarding safety, control, and accountability requirements governing the storage and use of licensed byproduct material such as Sodium-24 and Americium-241. It is concluded therefrom that this amendment does not present a significant hazards consideration.

A copy of a related notice, which has been forwarded to the Office of the Federal Register for publication, is enclosed for your information.

Sincerely,

*151*  
Voss A. Moore, Assistant Director  
for Boiling Water Reactors  
Directorate of Licensing

Enclosures:

1. Amendment 1 to License DPR-33
2. Federal Register Notice

*Lia + C.P.*

OFFICE	(see next page)				
CC: ▶					
SURNAME ▶					
DATE ▶					

SEP 25 1973

cc: Mr. Robert H. Marquis  
General Counsel  
629 New Sprankle Building  
Knoxville, Tennessee 37919

Honorable William J. Baxley  
Attorney General  
State of Alabama  
Montgomery, Alabama 36104

Honorable Henry H. Caddell  
Assistant Attorney General  
State of Alabama  
Montgomery, Alabama 36104

Mr. Frank L. Parker  
Environmental and Water Resources  
Engineering  
Vanderbilt University  
Nashville, Tennessee 37235

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

Mr. Thomas Lee Hammons  
Chairman, Limestone County  
Board of Revenue  
Athens, Alabama 35611

Cecil Thomas, Nuclear Engineer  
303 Power Building  
Chattanooga, Tennessee 37401

Mrs. Maude S. Miller, Librarian  
Athens Public Library  
South and Forrest  
Athens, Alabama 35611

Mr. Aubrey Godwin, Acting Director  
Division of Radiological Health  
Alabama Department of Public Health  
State Office Building, Room 313  
Montgomery, Alabama 36104

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OFFICE ▶	L: BWR-2	L: BWR-2	L: BWR-2	OGC	L: BWR
SURNAME ▶	HSmith:ew	FWilliams	JFSto	RM,	VAMoore
DATE ▶	9/21/73	9/21/73	9/21/73	9/21/73	9/24/73

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Voss A. Moore, Assistant Director  
for Boiling Water Reactors  
Directorate of Licensing

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Attorney General  
State of Alabama  
Montgomery, Alabama 36104

Honorable Henry H. Caddell  
Assistant Attorney General  
State of Alabama  
Montgomery, Alabama 36104

OFFICE ▶	(see next page)				
SURNAME ▶					
DATE ▶					

cc: Mr. Frank L. Parker  
 Environmental and Water Resources  
 Engineering  
 Vanderbilt University  
 Nashville, Tennessee 37235

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 State Health Officer  
 State Department of Public Health  
 State Office Building  
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 Chairman, Limestone County  
 Board of Revenue  
 Athens, Alabama 35611

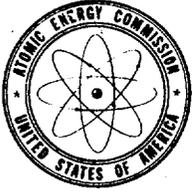
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 V. A. Moore  
~~C. Hebron, F&M~~  
~~D. Foster, F&M~~  
 R. Chitwood, F&M  
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 H. Smith  
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 W. Miller, DR:AO  
 R. Clark, EP  
 BWR Branch Chiefs  
 ACRS (16)

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SURNAME ▶	HSmith:ew	FWilliams	JFStolz		VAMoore	AGiambusso
DATE ▶	8/1/73	8/17/73	8/17/73	8/1/73	8/27/73	



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

TENNESSEE VALLEY AUTHORITY  
(BROWNS FERRY NUCLEAR PLANT, UNIT 1)

DOCKET NO. 50-259

FACILITY OPERATING LICENSE

Amendment No. 1  
License No. DPR-33

1. The Atomic Energy Commission (the Commission) having found that:
  - A. The application for amendment complies with the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations set forth in 10 CFR Chapter 1;
  - B. The facility will operate in conformity with the license, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. Prior public notice of proposed issuance of this amendment is not required since the amendment does not present a significant hazards consideration.
  
2. Accordingly, Facility Operating License No. DPR-33 issued to Tennessee Valley Authority is hereby amended by revising the following paragraphs thereof in their entirety to read:
  - 2B(3)e. Sodium-24, up to 1000 millicuries without restriction as to chemical or physical form; and
  
  - 2B(3)g. Americium-241, 1 sealed source of 10 curies in the form of an Americium-Beryllium neutron source, and 1 millicurie without restriction as to the chemical or physical form.

This amendment is effective as of the date of issuance.

FOR THE ATOMIC ENERGY COMMISSION

*A Giambusso*

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

Date of Issuance: **SEP 25 1973**

UNITED STATES ATOMIC ENERGY COMMISSION

DOCKET NO. 50-259

TENNESSEE VALLEY AUTHORITY

(BROWNS FERRY NUCLEAR PLANT, UNIT 1)

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

Notice is hereby given that the Atomic Energy Commission (the Commission) has issued Amendment No. 1 to Facility Operating License No. DPR-33 to the Tennessee Valley Authority (the licensee). This amendment authorizes the licensee to possess 1,000 millicuries of sodium-24 instead of 500 millicuries and 1 millicurie of Americium-241 without restriction as to the chemical or physical form instead of in the form of sealed or plated sources. The facility is a boiling water nuclear reactor located at the licensee's site in Limestone County, Alabama.

Additional Sodium-24 is required for efficiency testing of Unit 1 turbine by means of steam quality determinations. The 1 millicurie of Americium-241 is needed without restriction as to chemical or physical form to allow the material to be procured in liquid form, so individual sources which will be used in the calibration of the radiochemical laboratory counting instrumentation can be fabricated in the same manner as the samples whose activity is to be measured. The licensee has described in a letter to the Commission dated September 17, 1973, the material's usage and control and has in force for the Browns Ferry Nuclear Plant, Standard Practice Number 8, entitled "Radioactive Byproduct Materials," which contains procedures and authorizations regarding safety, control, and accountability requirements governing the storage and use of licensed byproduct material such as Sodium-24 and Americium-241. It is concluded therefrom that this amendment does not

present a significant hazards consideration.

The Director of Regulation has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the license amendment.

The amendment is effective as of the date of issuance. The licensee's application for amendment dated September 17, 1973, and a copy of Amendment No. 1 to Facility Operating License No. DPR-33 is available for public inspection at the Commission's Public Document Room at 1717 H Street, N.W., Washington, D.C. 20545, and the Athens Public Library, South and Forrest, Athens, Alabama 35611. Single copies of the amendment may be obtained upon request addressed to the United States Atomic Energy Commission, Washington, D.C. 20545, Attention: Deputy Director for Reactor Projects, Directorate of Licensing.

Dated at Bethesda, Maryland, this 25<sup>th</sup> day of September, 1973.

FOR THE ATOMIC ENERGY COMMISSION



Francis J. Williams, Jr. (for)  
John F. Stolz, Chief  
Boiling Water Reactors Branch No. 2  
Directorate of Licensing