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

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Posted

July 2, 1976

Docket Nos. 50-259
and 50-260

Am-21 to
DPR-52

Tennessee Valley Authority
ATTN: **Mr. Godwin Williams, Jr.**
Manager of Power
818 Power Building
Chattanooga, Tennessee 37201

Gentlemen:

The Commission has issued the enclosed Amendments Nos. 24 and 21 to Facility Licenses Nos. DPR-33 and DPR-52, respectively, for the Browns Ferry Nuclear Plant, Units Nos. 1 and 2.

These amendments change the provisions in the Technical Specifications to revise the network of remote atmospheric monitoring stations to conform with the network as approved by the Commission for Unit No. 3. They permit the relocation of two remote air monitors from distant location, 45 miles from the facility. One of these monitors will be relocated to the site boundary of the facility, and the other will be available as a stand-by for any of the eleven remote air monitors which becomes inoperable. Monitoring at distances of about 45 miles from the plant is adequately provided by two other distant remote air monitoring stations.

These amendments involve only changes in the monitoring program and do not authorize a change in effluent types or total amounts nor an increase in power level, and will not result in any significant environmental impact. Having made this determination we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental statement, negative declaration or environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

These changes in the monitoring program do not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. They do not involve a significant increase in the probability or consequences of an accident, do not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by these actions.

A copy of the related Federal Register Notice is enclosed.

Sincerely,

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures:
1. Amendment No. 24 to DPR-33
2. Amendment No. 21 to DPR-52
3. Federal Register Notice

cc w/enclosures:
See next page

cc w/enclosures:
H. S. Sanger
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Athens Public Library
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Mr. Thomas Lee Hammons
Chairman, Limestone County Board
of Revenue
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Ira L. Myers, M.D.
State Health Officer
State Department of Public Health
State Office Building
Montgomery, Alabama 36104

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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-259

BROWNS FERRY NUCLEAR PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 24
License No. DPR-33

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The facility will operate in conformity with the provisions of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission;

   B. 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;

   C. 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

   D. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 2, 1976

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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-260

BROWNS FERRY NUCLEAR PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 21
License No. DPR-52

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The facility will operate in conformity with the provisions of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission;

   B. 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;

   C. 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

   D. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 2, 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 24 TO DPR-33

AND LICENSE AMENDMENT NO. 21 TO DPR-52

DOCKET NOS. 50-259 AND 50-260

Revise Appendix A as follows:

1. Remove pages 221, 222, 232, and 234 and insert revised identically numbered pages.

2. Add page 234a.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
8. Radioactive gases released from each unit's turbine and reactor building roof vents, the radwaste building roof vents, and the main stack shall be continuously monitored. To accomplish this, at least one reactor building and one turbine building vent monitoring system per unit shall be operating whenever that unit's air ejectors are in service. Also, one radwaste building system vent monitoring channel, and one main stack monitoring system shall be operating whenever any air ejector is in service. If normal monitoring systems are not available, temporary monitors or other systems shall be used to monitor effluent. A monitoring channel may be out of service for 1-hour for functional testing without providing a temporary monitor. If these requirements are not satisfied for the stack or radwaste vent monitor, the reactors shall be in the hot shutdown condition within 24 hours for the stack and 10 days for the radwaste vent. If these requirements are not satisfied for the reactor and turbine building vents the affected reactor shall be in hot shutdown condition within 10 days.	**4.8.B Airborne Effluents**
9. The primary containment shall be purged through the standby gas treatment system.	**C. Radiological Environmental Monitoring Program** **An environmental monitoring program shall be conducted as described below and outlined in Table 4.8.F.** **1. Atmospheric Monitoring** **a. The atmospheric monitoring network is divided into three subgroups consisting of 11 monitoring stations. The monitoring stations are shown on Figures 4.8-1 and 4.8-1a These monitoring locations are subject to change dependent upon continued evaluation of the environmental monitoring program. The station at Muscle Shoals will be used as background reference.** **Each monitor shall be capable of continuously sampling air at regulated flow of approximately three cubic feet per**

3.8. C Radiological Environmental Monitoring Program

An environmental monitoring program shall be conducted to evaluate the effects of station operation on the environs and to verify the effectiveness of the source controls on radioactive materials.

4.8. C Radiological Environmental Monitoring Program

minute through a particulate filter. In series with, but downstream of, the particulate filter is a charcoal filter used to collect iodine. Each monitor has a collection to obtain rainwater on a continuous basis and a horizontal platform that is covered with gummed acetate to catch and hold heavy particulate fallout.

The local monitors shall be equipped with a G-M tube located next to the particulate filter which provides local and remote readout in the control room on stripchart recorders.

Thermoluminescent dosimeters shall be used to record gamma radiation levels at each remote and perimeter station. The TLD shall be processed quarterly.

b. The particulate filters shall be removed weekly from each monitoring station and analyzed for gross beta activity. In addition, the filters for each station shall be composited monthly and quantitatively and qualitatively analyzed for at least 10 specific gamma-emitting radionuclides.*

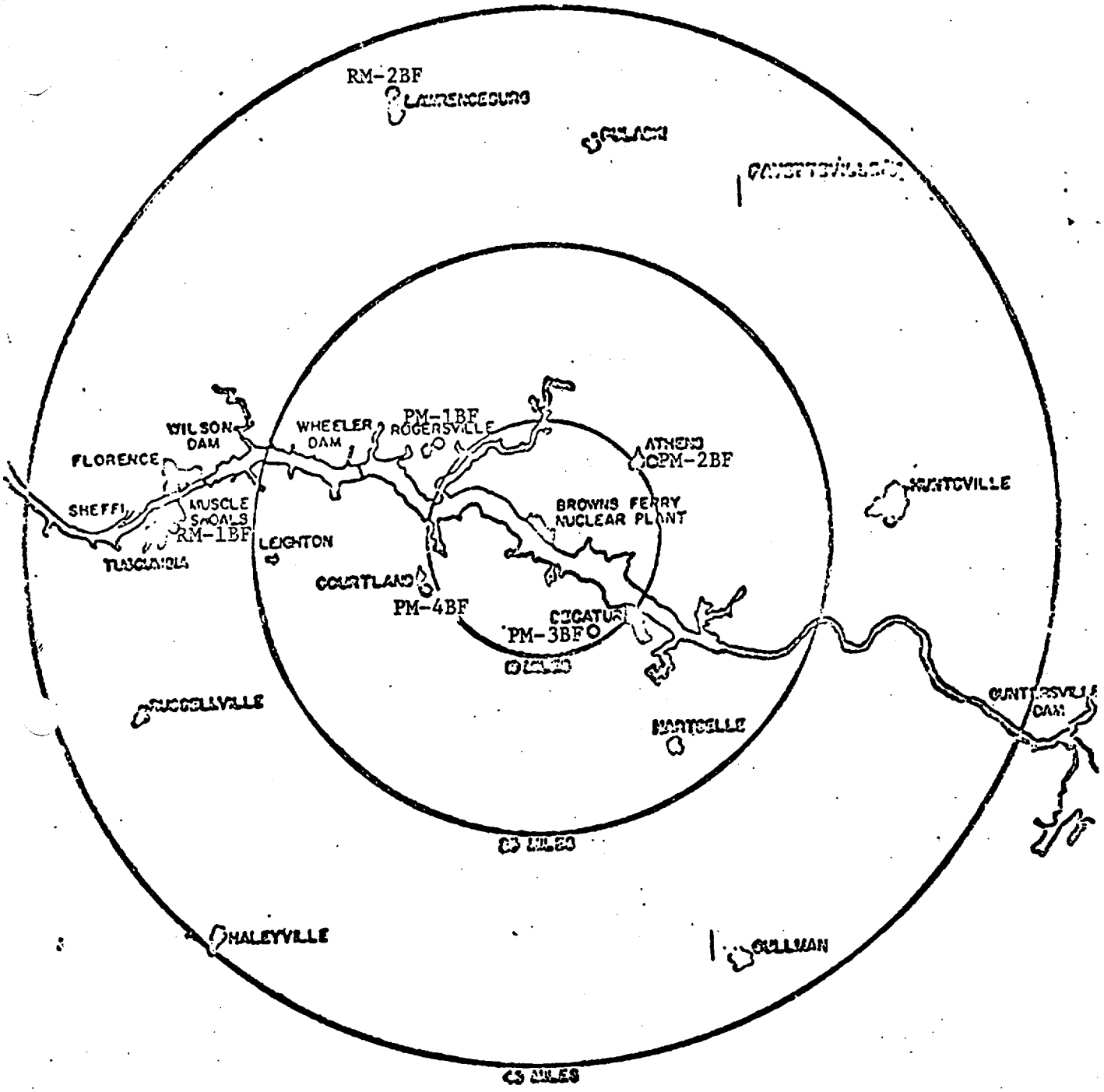
*The laboratory is presently gamma scanning a sample both quantitatively and qualitatively for the following radionuclides: ^{137}Cs, ^{134}Cs, $^{103,106}Ru$, $^{141,144}Ce$, ^{95}Zr, ^{95}Nb, ^{140}Ba, ^{140}La, ^{131}I, ^{40}K, ^{60}Co, ^{58}Co, ^{54}Mn, ^{51}Cr, and ^{65}Zn.

TABLE 4.8.F
RADIOLOGICAL ENVIRONMENTAL SURVEILLANCE PROGRAM

	Criteria and Sampling Locations	Collection Frequency	Analysis/Counting
I. Atmospheric			
A. Air			
1. Particulate	Filter paper at 11 locations as shown on Figures 4.8-1 and 4.8-1a	Weekly	Gross beta (gamma scan monthly) ^{131}I
2. Radioiodine	Charcoal filter same locations as I.A.1.	Weekly	
B. Fallout	Gummed acetate, same locations as I.A.1.	Monthly	Gross beta
C. Rainwater	Same locations as I.A.1.	Monthly	Gross beta, ^{89}Sr, ^{90}Sr ^{3}H
II. Reservoir			
A. Water			
1. Municipal (public supplies)	Locations as shown in Table 4.8.C	Monthly [a] Quarterly [a]	Gross beta, gamma scan, ^{3}H
2. River	Plant discharge and Elk River Five locations given in table 4.8.E	Monthly Quarterly	Gross alpha, gross beta, gamma scan, ^{89}Sr, ^{90}Sr ^{3}H
B. Aquatic Biota			
1. Fish (buffalo and crappie)	Three locations	Semiannually	Gross beta, gamma scan, ^{89}Sr, ^{90}Sr
2. Shellfish (Asiatic clams)	Four locations	Semiannually	Gross beta, gamma scan, (^{89}Sr, ^{90}Sr shells only)
3. Plankton	Three locations	Semiannually	Gross beta, gamma scan ^{89}Sr, ^{90}Sr
C. Sediment	Four locations	Semiannually	Gross beta, gamma scan. ^{89}Sr, ^{90}Sr

a. See 4.8.C.3.f for definition of sample frequency.

TERRE RIAL MONITORING NETWO



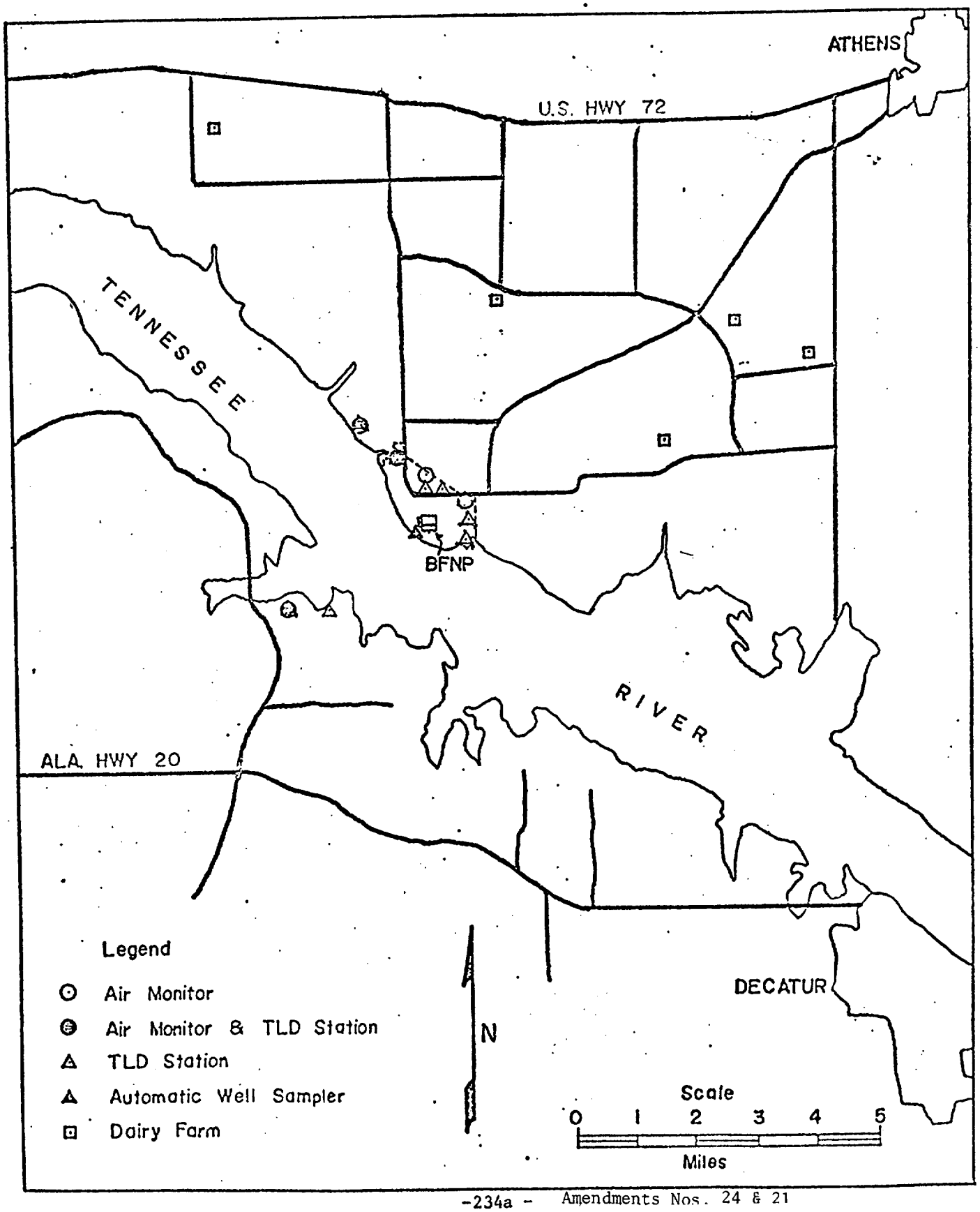
O—ENVIRONMENTAL MONITORING STATION
(Air particle, radioiodine, fallout, rainwater, soil, and vegetation)

Figure 4.8-1

Figure 4.8-1a

LOCAL MONITORING STATIONS

BROWNS FERRY NUCLEAR PLANT



UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-259 AND 50-260

TENNESSEE VALLEY AUTHORITY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 24 to Facility Operating License No. DPR-33 and Amendment No. 21 to Facility Operating License No. DPR-52 issued to Tennessee Valley Authority (the licensee) which revised Technical Specifications for operation of the Browns Ferry Nuclear Plant, Units Nos. 1 and 2, located in Limestone County, Alabama. The amendments are effective as of the date of issuance.

These amendments change the provisions in the Technical Specifications to revise the network of remote atmospheric monitoring stations to conform with the network as approved by the Commission for Unit No. 3.

The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR § 51.5(d)(4) an environmental statement, negative declaration,

or environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see Amendment No. 24 to License No. DPR-33 and Amendment No. 21 to License No. DPR-52. These items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 2nd day of July 1976.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors