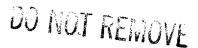
LICENSE AUTHORITY FILE COP



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

May 4, 1988

Post-ed Amot. 148 to DPR-33

Mr. S. A. White Manager of Nuclear Power Tennessee Valley Authority 6N 38A Lookout Place 1101 Market Street Chattanooga, Tennessee 37402-2801

(50-259)260/296

Dear Mr. White:

NUCLEAR REG

Dccket No.

SUBJECT: TECHNICAL SPECIFICATION CHANGE TO TABLES 3.2.B AND 4.2.K (TAC 00267, 00268, 00269) (TS 237)

Browns Ferry Nuclear Plant, Units 1, 2, and 3 Re:

The Commission has issued the enclosed Amendments Nos. 148, 144, and 119 to Facility Operating Licenses Nos. DPR-33, DPR-52 and DPR-68 for the Browns Ferry Nuclear Plant, Units 1, 2 and 3, respectively. These amendments are in response to your application dated January 14, 1988. The amendments modify Technical Specification Tables 3.2.B and 4.2.K to correct identified inconsistencies.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

A. Hermann

Robert A. Hermann, Acting Assistant Director for Projects TVA Projects Division Office of Special Projects

Enclosures:

- Amendment No. 148 to 1. License No. DPR-33
- 2. Amendment No. 144 to
- License No. DPR-52
- 3. Amendment No. 119 to License No. DPR-68
- 4. Safety Evaluation

cc w/enclosures: See next page

May 4, 1988

Docket No. 50-259/260/296

Mr. S. A. White Manager of Nuclear Power Tennessee Valley Authority 6N 38A Lookout Place 1101 Market Street Chattanooga, Tennessee 37402-2801

Distribution	
Docket File	Projects Rdg.
NRC PDR	BDLiaw
Local PDR	WJones
SEbneter	OGC-Rockville
JAxelrad	JPartlow
SRichardson	EJordan
GZech	TBarnhart(12)
GGears	GPA/PA
JKelly(2) 🗧	LFMB
CJamerson(2)	EButcher
Algnatonis, RI	I

dg. FMiraglia JRutberg KBarr, RII 11e DHagan ACRS(10) BFN File 12) TVA-Rockville

Dear Mr. White:

SUBJECT: TECHNICAL SPECIFICATION CHANGE TO TABLES 3.2.B AND 4.2.K (TAC 00267, 00268, 00269) (TS 237)

Re: Browns Ferry Nuclear Plant, Units 1, 2, and 3

The Commission has issued the enclosed Amendments Nos.148,144, and119 to Facility Operating Licenses Nos. DPR-33, DPR-52 and DPR-68 for the Browns Ferry Nuclear Plant, Units 1, 2 and 3, respectively. These amendments are in response to your application dated January 14, 1988. The amendments modify Technical Specification Tables 3.2.B and 4.2.K to correct identified inconsistencies.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

Original Signed by

Robert A. Hermann, Acting Assistant Director for Projects TVA Projects Division Office of Special Projects

Enclosures:

- 1. Amendment No. 148 to License No. DPR-33
- 2. Amendment No. 144 to License No. DPR-52
- 3. Amendment No. 119 to License No. DPR-68
- 4. Safety Evaluation

cc w/enclosures: See next page \*SEE PREVIOUS PAGE FOR CONCURRENCE OSP:TVA/LA\* OSP:TVA/PM\* OSP:TVA/PM\* CJamerson GGears JKelly 4/12/88 4/13/88 4/12/88

TVA:AD/TP\* BDLiaw 4/20/88 OGC-Rockville\* RBachman 4/25/88

TVA : TVA : TVA RAHermann 5, A/ 4/88 Mr. S. A. White Tennessee Valley Authority

cc: General Counsel Tennessee Valley Authority 400 West Summit Hill Drive Ell B33 Knoxville, Tennessee 37902

Mr. R. L. Gridley Tennessee Valley Authority 5N 157B Lookout Place Chattanooga, Tennessee 37402-2801

Mr. H. P. Pomrehn Tennessee Valley Authority Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, Alabama 35602

Mr. M. J. May Tennessee Valley Authority Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, Alabama 35602

Mr. D. L. Williams Tennessee Valley Authority 400 West Summit Hill Drive W10 B85 Knoxville, Tennessee 37902

Chairman, Limestone County Commission P.O. Box 188 Athens, Alabama 35611

Claude Earl Fox, M.D. State Health Officer State Department of Public Health State Office Building Montgomery, Alabama 36130 Browns Ferry Nuclear Plant Units 1, 2, and 3

Regional Administrator, Region II U.S. Nuclear Regulatory Commission 101 Marietta Street, N.W. Atlanta, Georgia 30323 Resident Inspector/Browns Ferry NP U.S. Nuclear Regulatory Commission Route 12, Box 637 Athens, Alabama 35611

Mr. Richard King c/o U.S. GAO 1111 North Shore Drive Suite 225, Box 194 Knoxville, Tennessee 37919

Dr. Henry Myers, Science Advisor Committee on Interior and Insular Affairs U.S. House of Representatives Washington, D.C. 20515



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

### TENNESSEE VALLEY AUTHORITY

### DOCKET NO. 50-259

#### BROWNS FERRY NUCLEAR PLANT, UNIT 1

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 148 License No. DPR-33

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Tennessee Valley Authority (the licensee) dated January 14, 1988, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, 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. 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.

- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-33 is hereby amended to read as follows:
  - (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 148, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Hermann, Acting Assistant Director for Projects TVA Projects Division Office of Special Projects

Attachment: Changes to the Technical Specifications

Date of Issuance: May 4, 1988

## ATTACHMENT TO LICENSE AMENDMENT NO. 148

## FACILITY OPERATING LICENSE NO. DPR-33

## DOCKET NO. 50-259

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf pages\* are provided to maintain document completeness.

REMOVE	INSERT
3.2/4.2-14	3.2/4.2-14
3.2/4.2-15	3.2/4.2-15*
3.2/4.2-62	3.2/4.2-62

+	Minimum No. Operable per Trip Sys(l)	Function _	Trip Level Setting	Action	Remar	<u>ks</u>
	2	Instrument Channel - Reactor Low Water Level	≥ 470" above vessel zero.	A	l. Below trip HPC1.	setting initiated
	2	Instrument Channel - Reactor Low Water Level	$\geq$ 470" above vessel zero.	A	l. Multiplier RCIC.	relays initiate
	2	Instrument Channel – Reactor Low Water Level (LIS-3-58A-D, SW #1)	$\geq$ 378" above vessel zero.	A	l. Below trip CSS.	setting initiates
					Multiplier LPCI.	relays initiate
					2. Multiplier initiates a	relay from CSS ccident signal (15).
3.2/4.2-14	2(16)	Instrument Channel - Reactor Low Water Level (LIS-3-58A-D, SW #2)	≥ 378" above vessel zero.	A	conjunction high pressu level permi delay timer	settings, in with drywell me, low water ssive, 120 sec. and CSS or unning, initiates
4	1(16)	Instrument Channel – Reactor Low Water Level Permissive (LIS-3-184 & 185, SW #1)	≥ 544" above vessel zero.	A	l. Below trip for initiat	setting permissive ting signals on ADS.
	1	Instrument Channel – Reactor Low Water Level (LITS-3-52 and 62, SW #1)	> 312 5/16" above vessel zero (2/3 core height)	. A	inadverten	setting prevents t operation of t spray during ondition.

## TABLE 3.2.B INSTRUMENTATION THAT INITIATES OR CONTROLS THE CORE AND CONTAINMENT COOLING SYSTEMS

.,

BFN-Unit 1

Amendment No.148

BFN Unit

<u>ل</u>

### TABLE 3.2.B (Continued)

Minimum No. Operable Per Trip_Sys(l)_	Function	Trip Level Setting	Action	Remarks
2	Instrument Channel - Drywell High Pressure (PS-64-58 E-H)	l≤ p≤2.5 psig	A	<ol> <li>Below trip setting prevents inadvertent operation of containment spray during accident conditions.</li> </ol>
2	Instrument Channel – Drywell High Pressure (PS-64-58 A-D, SW #2)	<pre>&lt; 2.5 psig</pre>	A	<ol> <li>Above trip setting in con- junction with low reactor pressure initiates CSS. Multiplier relays initiate</li> </ol>
				HPCI. 2. Multiplier relay from CSS initiates accident signal. (19
2	Instrument Channel - Reactor Low Water Level (LS-3-56A, B, C, D)	≥ 470" above vessel zero	A	<ol> <li>Below trip setting trips recirculation pumps.</li> </ol>
2	Instrument Channel - Reactor High Pressure (PS-3-204 A, B, C, D)	≤ 1120 psig	A	<ol> <li>Above trip setting trips recirculation pumps.</li> </ol>
2	Instrument Channel - Drywell High Pressure (PS-64-58A-D, SW #1)	≤ 2.5 psig	A	<ol> <li>Above trip setting in conjunction with low reactor pressure initiates LPCI.</li> </ol>
2(16)	Instrument Channel – Drywell High Pressure (PS-64-57A-D)	≤ 2.5 psig	A	<ol> <li>Above trip setting, in conjunction with low reactor water level, drywell high pressure, 120 sec. delay timer and CSS or RHR pump running, initiates ADS.</li> </ol>

BFN-Unit 1

BFN Unit 1

BFN Unit 1

3.2/4.2-62

## TABLE 4.2.K

Radioactive Gaseous Effluent Instrumentation Surveillance

Instrument	Instrument Check	Source Check	Channel <u>Calibration</u>	Functional Test
1. STACK a. Noble Gas Monitor (5) b. Iodine Cartridge c. Particulate Filter d. Sampler Flow Abnorma e. Stack Flowmeter	ະ ພ	M NA NA NA	R(1) NA NA R R	Q(2) NA NA Q Q
2. REACTOR/TURBINE BLDG VEN a. Noble Gas Monitor (6) b. Iodine Sampler c. Particulate Sampler d. Sampler Flowmeter	D W W D	M NA NA NA	R(1) NA NA R	Q(2) NA NA Q
<ol> <li>TURBINE BLDG EXHAUST         <ul> <li>a. Noble Gas Monitor (6</li> <li>b. Iodine Sampler</li> <li>c. Particulate Sampler</li> <li>d. Sampler Flowmeter</li> </ul> </li> </ol>	) D W W D	M NA NA NA	R(1) NA NA R	Q(2) NA NA Q
<ol> <li>RADWASTE BLDG VENT         <ul> <li>a. Noble Gas Monitor (6</li> <li>b. Iodine Sampler</li> <li>c. Particulate Sampler</li> <li>d. Sampler Flowmeter</li> </ul> </li> </ol>	) D W W D	M NA NA	R(1) NA NA R	Q(2) NA NA Q.
5. OFF GAS HYDROGEN ANALYZE (H <sub>2</sub> A, H <sub>2</sub> B)	R D	NA	<sub>R</sub> (3)	Q
<ol> <li>OFF GAS POST TREATMENT ( a. Noble Gas Activity M b. Sample Flow Abnormal</li> </ol>	ionitor U	M NA	R(1) R	Q(4) Q(2)

BFN-Unit 1

Amendment No. 132,148



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

### TENNESSEE VALLEY AUTHORITY

#### DOCKET NO. 50-260

#### BROWNS FERRY NUCLEAR PLANT, UNIT 2

## AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.144 License No. DPR-52

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Tennessee Valley Authority (the licensee) dated January 14, 1988, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, 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. 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.

- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-52 is hereby amended to read as follows:
  - (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 144, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

÷

Robert A. Hermann, Acting Assistant Director for Projects TVA Projects Division Office of Special Projects

Attachment: Changes to the Technical Specifications

Date of Issuance: May 4, 1988

- 2 -

## ATTACHMENT TO LICENSE AMENDMENT NO. 144

## FACILITY OPERATING LICENSE NO. DPR-52

### DOCKET NO. 50-260

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf pages\* are provided to maintain document completeness.

REMOVE	INSERT
3.2/4.2-14	3.2/4.2-14
3.2/4.2-15	3.2/4.2-15*
3.2/4.2-62	3.2/4.2-62

# TABLE 3.2.B INSTRUMENTATION THAT INITIATES OR CONTROLS THE CORE AND CONTAINMENT COOLING SYSTEMS

BFN Unit 2	Minimum No. Operable Per Trip Sys(1)	Function	Trip Level Setting	Action	Remarks
	2	Instrument Channel - Reactor Low Water Level (LIS-3-58A-D)	$\geq$ 470" above vessel zero.	A	<ol> <li>Below trip setting initiated HPCI.</li> </ol>
	2	Instrument Channel - Reactor Low Water Level (LIS-3-58A-D)	$\geq$ 470" above vessel zero.	A	l. Multiplier relays initiate RCIC.
	2	Instrument Channel Reactor Low Water Level (LIS-3-58A-D)	$\geq$ 378" above vessel zero.	A	1. Below trip setting initiates CSS.
ယ					Multiplier relays initiate LPCI.
2/4.					2. Multiplier relay from CSS initiates accident signal (15)
.2-14	2(16)	Instrument Channel - Reactor Low Water Level (LIS-3-58A-D)	≥ 378" above vessel zero.	A	<ol> <li>Below trip settings, in conjunction with drywell high pressure, low water level permissive, 120 sec. delay timer and CSS or RHR pump running, initiates ADS.</li> </ol>
	1(16)	Instrument Channel – Reactor Low Water Level Permissive (LIS-3-184, 185)	≥ 544" above vessel zero.	A	<ol> <li>Below trip setting permissive for initiating signals on ADS.</li> </ol>
	1	Instrument Channel – Reactor Low Water Level (LIS-3-52 and 62)	> 312 5/16" above vessel zero (2/3 core height)	. A	<ol> <li>Below trip setting prevents inadvertent operation of containment spray during accident condition.</li> </ol>

BFN-Unit 2

TABLE	3.	2.B	(Continued)	
-------	----	-----	-------------	--

Minimum No. Operable Per Trip Sys(1)	Function	Trip Level Setting	Action		Remarks
2	Instrument Channel - Drywell High Pressure (PIS-64-58 E-H)	1≤ p≤2.5 psig	A	۱.	Below trip setting prevents inadvertent operation of containment spray during accident conditions.
2	Instrument Channel - Drywell High Pressure (PS-64-58 A-D)	<u>&lt;</u> 2.5 psig	A		Above trip setting in con- junction with low reactor pressure initiates CSS. Multiplier relays initiate HPCI.
				2.	Multiplier relay from CSS initiates accident signal. (15)
2	Instrument Channel - Reactor Low Water Level (LIS-3-56A-D)	> 470" above vessel zero	A	۱.	Below trip setting trips recirculation pumps.
2	Instrument Channel - Reactor High Pressure (PIS-3-204A-D)	<u>≤</u> 1120 psig	A	1.	Above trip setting trips recirculation pumps.
2	Instrument Channel - Drywell High Pressure (PIS-64-58A-D)	<u>&lt;</u> 2.5 psig	A	۱.	Above trip setting in conjunction with low reactor pressure initiates LPCI.
2(16)	Instrument Channel - Drywell High Pressure (PIS-64-57A-D)	<u>&lt;</u> 2.5 psig	A	1.	Above trip setting, in conjunction with low reactor water level, drywell high pressure, 120 sec. delay timer and CSS or RHR pump running, initiates ADS.

.

BFN Unit 2

3.2/4.2-15

BFN Unit 2

3.2/4.2-62

TABLE 4.2.K

Ins	trument	Instrument Check	Source Check	Channel <u>Calibration</u>	Functional Test
1.	STACK a. Noble Gas Monitor (5) b. Iodine Cartridge c. Particulate Filter d. Sampler Flow Abnormal e. Stack Flowmeter	D W D D	M NA NA NA NA	R(1) NA NA R R R	Q(2) NA NA Q Q
2.	REACTOR/TURBINE BLDG VENT a. Noble Gas Monitor (6) b. Iodine Sampler c. Particulate Sampler d. Sampler Flowmeter	D W D	M NA NA NA	R(1) NA NA R	Q <sup>(2)</sup> NA NA Q
3.	TURBINE BLDG EXHAUST a. Noble Gas Monitor (6) b. Iodine Sampler c. Particulate Sampler d. Sampler Flowmeter	D W D	M NA NA NA	R(1) NA NA R	Q(2) NA NA Q
4.	RADWASTE BLDG VENT a. Noble Gas Monitor (6) b. Iodine Sampler c. Particulate Sampler d. Sampler Flowmeter	D W D	M NA NA NA	R(1) NA NA R	Q(2) NA NA Q
5.	OFF GAS HYDROGEN ANALYZER (H <sub>2</sub> A, H <sub>2</sub> B)	D	NA	<sub>R</sub> (3)	Q
6.	OFF GAS POST TREATMENT (5) a. Noble Gas Activity Monitor b. Sample Flow Abnormal	D D	M NA	R(1) R	Q(4) Q(2)

Radioactive Gaseous Effluent Instrumentation Surveillance

BFN-Unit 2

Amendment No. 128, 144



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

### TENNESSEE VALLEY AUTHORITY

#### DOCKET NO. 50-296

#### BROWNS FERRY NUCLEAR PLANT, UNIT 3

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 119 License No. DPR-68

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Tennessee Valley Authority (the licensee) dated January 14, 1988 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, 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. 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 changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-68 is hereby amended to read as follows:
  - (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.119, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

÷

Kun

Robert A. Hermann, Acting Assistant Director for Projects TVA Projects Division Office of Special Projects

Attachment: Changes to the Technical Specifications

Date of Issuance: May 4, 1988

## ATTACHMENT TO LICENSE AMENDMENT NO. 119

## FACILITY OPERATING LICENSE NO. DPR-68

## DOCKET NO. 50-296

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

#### REMOVE

### INSERT

3.2/4.2-61

3.2/4.2-61

Instrument	Instrument Check	Source Check	<u>Calibration</u>	Test
l. STACK a. Noble Gas Monitor ( b. Iodine Cartridge c. Particulate Filter d. Sampler Flow Abnorm e. Stack Flowmeter	20 20	M NA NA NA NA	R(1) NA NA R R R	Q(2) NA NA Q Q
2. REACTOR/TURBINE BLDG VE a. Noble Gas Monitor b. Iodine Sampler c. Particulate Sampler d. Stack Flowmeter	NT W W D	M NA NA NA	R(1) NA NA R	Q(2) NA NA Q
3. TURBINE BLDG EXHAUST a. Noble Gas Monitor ( b. Iodine Sampler c. Particulate Sampler d. Stack Flowmeter	<b>W</b>	M NA NA NA	R(1) NA NA R	Q(2) NA NA Q
4. RADWASTE BLDG VENT a. Noble Gas Monitor ( b. Iodine Sampler c. Particulate Sampler d. Stack Flowmeter		M NA NA NA	R(1) NA NA R	Q(2) NA NA Q
5. OFF GAS HYDROGEN ANALYZ (H <sub>2</sub> A, H <sub>2</sub> B)	ER D	NA	<sub>R</sub> (3)	Q
6. OFF GAS POST TREATMENT a. Noble Gas Activity b. Sample Flow Abnorma	Monitor U	M NA	R(1) R	Q(4) Q(2)

TABLE 4.2.K Radioactive Gaseous Effluent Monitoring Instrumentation

BFN-Unit 3

BFN Unit 3

3.2/4.2-61



## SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

## SUPPORTING AMENDMENT NO. 148 TO FACILITY OPERATING LICENSE NO. DPR-33

## AMENDMENT NO. 144 TO FACILITY OPERATING LICENSE NO. DPR-52

AMENDMENT NO. 119 TO FACILITY OPERATING LICENSE NO. DPR-68

### TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3

DOCKETS NOS. 50-259, 50-260 AND 50-296

#### 1.0 INTRODUCTION

NUCLEAR REGULA

By letter dated January 14, 1988 (TS 237), the Tennessee Valley Authority (TVA or the licensee) requested amendments to Facility Operating Licenses Nos. DPR-33, DPR-52, and DPR-68 for the Browns Ferry Nuclear Plant (BFN), Units 1, 2 and 3. The proposed amendments involve two similar changes, both of which are corrections to references to footnotes applicable to instrumentation tables.

The first change is applicable to BFN Units 1 and 2 only. It is to correct a footnote referenced in Table 3.2.B, Instrumentation that Initiates or Controls the Core and Containment Cooling Systems. The table entry (page 3.2/4.2-14) for reactor low water level, which in conjunction with other signals will initiate the automatic depressurization system (ADS), is changed to reference note 16 instead of 14.

The second change applies to all three BFN units. It will delete the reference to footnote 4 in Table 4.2.K, Radioactive Gaseous Effluent Instrumentation Surveillance, for entry number 5 (offgas hydrogen analyzer). This change affects pages 3.2/4.2-62 for units 1 and 2, and page 3.2/4.2-61 for Unit 3.

#### 2.0 EVALUATION

In the current Technical Specification (TS) Table 3.2.B, Instrumentation that Initiates or Controls the Core and Containment Cooling Systems, for BFN Units 1 and 2, the footnote on the Minimum No. Operable per Trip System column for the Instrument Channel - Reactor Low Water Level trip switch which initiates ADS, is footnote number 14. This is an incorrect footnote. Footnote 14 states "RHRSW pump would be inoperable." There is no correlation between the reactor low water level switch which initiates ADS and the RHRSW system. The correct footnote is footnote 16 which states, "The ADS circuitry is capable of accomplishing its protective action with one operable trip system. Therefore one trip system may be taken out of service for functional testing and calibration for a period not to exceed eight hours."

Foctnote 16 is necessary in the Minimum No. Operable per Trip System column for this and several other instrumentation switches to provide the licensee the ability to take the instrumentation out of service (inoperable) to perform functional testing and calibration while establishing a time limit for this condition to exist. Footnote 16 is already referenced for other ADS instrumentation in this table and is currently referenced in BFN Unit 3 TS for this particular instrument channel. Footnote 16 is the appropriate footnote for this application and is therefore acceptable.

In the current Technical Specification (TS) Table 4.2.K, Radioactive Gaseous Effluent Instrumentation Surveillance, for BFN TS Units 1, 2 and 3, the note on the Functional Test column for Instrument No. 5, Offgas Hydrogen Analyzer, is note number 4. This is an incorrect note. Note 4 states that the functional test performed on this instrument will demonstrate that automatic isolation of the offgas line will occur when this instrument channel trips. This instrument channel was not designed to produce an isolation signal. However, any hydrogen analyzer abnormality will be annunciated in the Main Control Room.

The Final Safety Analysis Report does not take credit for or mention an isolation signal coming from the hydrogen analyzers on the offgas system. It cnly refers to a control room annunciation which does exist for high hydrogen concentrations. Also, NUREG-0483, Revision 3, "Standard Radiological Effluent Technical Specifications for Boiling Water Reactors," which provides model TS for this table, does not require such an isolation signal. Furthermore, it would not be an appropriate action to isolate the offgas system on an increasing hydrogen concentration for two reasons. First, hydrogen is not toxic or radioactive and therefore would not pose any threat to the public if released. Second, isolating the offgas system with an increasing hydrogen, thereby reducing the possibility of explosion. Note 4 is not appropriate for the application and the staff, therefore, finds the proposed change acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

The amendments involve a change to a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement nor environmental assessment need be prepared in connection with the issuance of these amendments.

#### 4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and sæfety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendments will not be inimical to the common defense and security nor to the health and safety of the public.

Principal Contributor: J. Kelly

Dated: May 4, 1988