April 19, 2005

Mr. Karl W. Singer Chief Nuclear Officer and Executive Vice President Tennessee Valley Authority 6A Lookout Place 1101 Market Street Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT, UNIT 1 — LICENSING ACTION STATUS AND INTERDEPENDENCIES (TAC NOS. MC1330, MC1427, MC2305, MC3812, MC3813, MC3822, MC3960, MC4070, MC4161, MC4659, MC4797, MC5254, AND MC5373)

Dear Mr. Singer:

The Tennessee Valley Authority (TVA, the licensee) has submitted 13 license amendment requests (TS-426, TS-427, TS-428, TS-430, TS-431, TS-432, TS-433, TS-434, TS-435, TS-436, TS-437, TS-438, and TS-447) since November 2003 in support of the recovery activities for Browns Ferry Nuclear Plant, Unit 1 (BFN1), excluding the license renewal application (LRA). In addition, there are two license conditions that must be satisfied prior to BFN1 restart. The U.S. Nuclear Regulatory Commission (NRC) staff is issuing this letter to confirm our understanding of the interdependencies and to provide the status of licensing actions.

A listing of the license amendment requests citing outstanding information is contained in Enclosure 1. This table also provides an updated list of the license amendment applications that involve instrumentation setpoints that were developed using Instrumentation, Systems, and Automation Society of America (ISA) Standard ISA-S67.04-1994 Method 3. This update includes one amendment package that was inadvertently omitted and corrects one typographical error from our letter dated January 6, 2005, on the subject of license amendment applications using Method 3.

Enclosure 2 provides a listing of licensing actions that includes TVA's requested completion dates and interdependencies. The interdependencies are graphically depicted in Enclosure 3. The NRC staff has found that, in general, the submittals provided by TVA have clearly identified the interrelationships between the requested license amendments. Nevertheless, the NRC staff is requesting TVA confirmation that our understanding of the interdependencies is correct.

The NRC staff is concerned that delays in the review or the denial of one licensing action may have an adverse effect on multiple other licensing actions, including the license renewal review. For example, the scope of the license renewal application review is dependent on the license amendment request associated with the allowable main steamline isolation valve leakage limits (TS-436). The NRC staff believes that a complete, high quality, and timely response to NRC staff questions is critical to the timely review of your applications.

The NRC staff has noted that several of the applications contain multiple parts that could be split into stand-alone licensing actions. For example, TS-447 contains a request to change both limiting safety system setpoints and the surveillance frequency. In some cases, portions of the amendment request could be reviewed and issued separately while technical issues are being resolved for the remainder of the amendment request. In the future, TVA may want to consider revising the scope of these applications in order to expedite NRC staff review and approval. Due to scheduling considerations and as requested in your letter dated January 7, 2005, the review of your LRA will be based on currently licensed thermal power limits for each of your units. The extended power uprate (EPU) review will address EPU conditions for the renewed license term later. The NRC staff will be reviewing the two applications. While every effort will be made to avoid overlap and duplication of reviews, the NRC staff may not completely preclude revisiting some of the license renewal issues, such as any intervening aging management program review changes, including any current licensing basis changes, during the conduct of the EPU review.

The NRC staff is reviewing closure packages for Generic Communications and Special Programs applicable to BFN1 during the period from 1985 through the present to verify that all required submittals are being tracked in your periodic Status of BFN1 Restart Issues report. The results of that review will be the subject of separate correspondence. These results may potentially impact the LRA review.

The NRC staff discussed this request with Mr. Tim Abney on April 6, 2005, and he agreed that a response would be provided within 30 days of the date of this letter.

If you have any questions, please contact Ms. Margaret Chernoff at (301) 415-4041 or Ms. Eva Brown at (301) 415-2315.

Sincerely,

## /**RA**/

Edwin M. Hackett, Director Project Directorate II Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-259

Enclosures: As stated

cc w/enclosures: See next page

The NRC staff has noted that several of the applications contain multiple parts that could be split into stand-alone licensing actions. For example, TS-447 contains a request to change both limiting safety system setpoints and the surveillance frequency. In some cases, portions of the amendment request could be reviewed and issued separately while technical issues are being resolved for the remainder of the amendment request. In the future, TVA may want to consider revising the scope of these applications in order to expedite NRC staff review and approval. Due to scheduling considerations and as requested in your letter dated January 7, 2005, the review of your LRA will be based on currently licensed thermal power limits for each of your units. The extended power uprate (EPU) review will address EPU conditions for the renewed license term later. The NRC staff will be reviewing the two applications. While every effort will be made to avoid overlap and duplication of reviews, the NRC staff may not completely preclude revisiting some of the license renewal issues, such as any intervening aging management program review changes, including any current licensing basis changes, during the conduct of the EPU review.

The NRC staff is reviewing closure packages for Generic Communications and Special Programs applicable to BFN1 during the period from 1985 through the present to verify that all required submittals are being tracked in your periodic Status of BFN1 Restart Issues report. The results of that review will be the subject of separate correspondence. These results may potentially impact the LRA review.

The NRC staff discussed this request with Mr. Tim Abney on April 6, 2005, and he agreed that a response would be provided within 30 days of the date of this letter.

If you have any questions, please contact Ms. Margaret Chernoff at (301) 415-4041 or Ms. Eva Brown at (301) 415-2315.

Sincerely, /**RA**/ Edwin M. Hackett, Director Project Directorate II Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-259

Enclosures: As stated

cc w/enclosures: See next page Distribution:

DISTINUTION.				
PUBLIC PDII/	2R/F EBrown	MChernoff	MMarshall	BClayton (Hard copy)
OGC ACR	S EHackett	BSheron	WBorchardt	RSubbaratnam
EHackett JDye	r SCahill, RII	YDiaz-Sanab	paria	

Package: ML050950256 ADAMS Accession No. ML050900421				Enclosure	3: ML05115019		NRR-106	
	PDII-2/PM		DII-2/PM	Ρ	DII-2/LA	RLEP/PM		
NAME	EBrown	M	MChernoff		BClayton YDiaz-Sanaba		ia	
DATE	4/19/05	4/	4/19/05		/19/05	4/19/05		
OFFICE	RLEP/PM		RLEP/SC		RLEP/SC	PDII-2/SC	PD	II/D
NAME	RSubbaratnam	SLee			PTKuo	MMarshall	ΕH	lackett
DATE	4/19/05		4/09/05		4/19/05	4/19/05	4/1	9/05

## OFFICIAL RECORD COPY

- 2 -

	Browns Ferry Unit 1 - Licensing Action Status List					
Number	Title	Next Action	Information Outstanding			
TS-430	Power Range Neutron Monitor Upgrade with Implementation of Average Power Range Monitor and Rod Block Monitor Technical Specification Improvements and Maximum Extended Load Line Limit Analyses	TVA	Supplement with Method 3 Resolution			
TS-434	Lowering the Allowable Value for Reactor Vessel Water Level - Low Level 3	TVA	Supplement with Method 3 Resolution			
TS-431	Extended Power Uprate	TVA	<ul> <li>Supplement with Method 3</li> <li>Resolution</li> <li>Supplement Concerning Large</li> <li>Transient Testing</li> </ul>			
TS-436	Increased Main Steam Isolation Valve Leakage Rate Limits and Exemption from 10 CFR 50, Appendix J	NRC	Complete Review			
TS-433	24-Month Fuel Cycle	TVA	Supplement with Method 3 Resolution			
TS-447	Extension of Channel Calibration Surveillance Requirement Performance Frequency And Allowable Value Revision	TVA	Supplement with Method 3 Resolution			
TS-438	Revision to Excess Flow Check Valve Surveillance Testing Frequency	NRC	Complete Review			

**ENCLOSURE 1** 

K. W. Singer

- 2 -

TS-432	Completion of License Condition 2.C(4)- Request for Amendment to License	NRC	Complete Review
TS-428	Update of Pressure-Temperature Curves	NRC	Complete Review
TS-426	Revision to Diesel Generators Allowed Outage Time	NRC	Complete Review
TS-437	Scram Discharge Instrument Volume Setpoint Change	TVA	Supplement with Method 3 Resolution
TS-427	Deletion of LPCI Motor Generator Sets	NRC	Complete Review
TS-435	Containment Air Dilution AOT	NRC	Complete Review

- 2 -

	Browns Ferry Unit 1 - Interdepen	dencies	
Number	Title	Submittal Date	Requested Date
TS-431	Extended Power Uprate (TS-431)	June 24, 2004	June 2005
	Dependencies		
	- Power Range Neutron Monitor Upgrade with Implementation of Average Power Range Monitor and Rod Block Monitor Technical Specification Improvements and Maximum Extended Load Line Limit Analyses (TS-430)	November 3, 2003	December 1, 2004
	- Lowering the Allowable Value for Reactor Vessel Water Level - Low Level 3 (TS-434)	March 9, 2004	March 11, 2005
	- 24-Month Fuel Cycle (TS-433)	August 16, 2004	September 1, 2005
TS-433	24-Month Fuel Cycle	August 16, 2004	September 1, 2005
	Dependencies		
	- Extension of Channel Calibration Surveillance Requirement Performance Frequency And Allowable Value Revision (TS-447)	August 16, 2004	June 2005
	- Power Range Neutron Monitor Upgrade with Implementation of Average Power Range Monitor and Rod Block Monitor Technical Specification Improvements and Maximum Extended Load Line Limit Analyses (TS- 430)	November 3, 2003	December 1, 2004
TS-438	Revision to Excess Flow Check Valve Surveillance Testing Frequency	October 12, 2004	November 1, 2005
	Dependencies		

K. W. Singer

## - 2 -

	- 24-Month Fuel Cycle (TS-433)	August 16, 2004	September 1, 2005
TS-432	Completion of License Condition 2.C(4)- Request for Amendment to License	October 12, 2004	November 1, 2005
	<u>Dependencies</u>		
	- 24-Month Fuel Cycle (TS-433)	August 16, 2004	September 1, 2005
	- Extension of Channel Calibration Surveillance Requirement Performance Frequency And Allowable Value Revision (TS-447)	August 16, 2004	June 2005

Mr. Karl W. Singer Tennessee Valley Authority cc: Mr. Ashok S. Bhatnagar, Senior Vice President Nuclear Operations Tennessee Valley Authority 6A Lookout Place 1101 Market Street Chattanooga, TN 37402-2801

Mr. Larry S. Bryant, General Manager Nuclear Engineering Tennessee Valley Authority 6A Lookout Place 1101 Market Street Chattanooga, TN 37402-2801

Mr. Michael D. Skaggs Site Vice President Browns Ferry Nuclear Plant Tennessee Valley Authority P.O. Box 2000 Decatur, AL 35609

General Counsel Tennessee Valley Authority ET 11A 400 West Summit Hill Drive Knoxville, TN 37902

Mr. John C. Fornicola, Manager Nuclear Assurance and Licensing Tennessee Valley Authority 6A Lookout Place 1101 Market Street Chattanooga, TN 37402-2801

Mr. Kurt L. Krueger, Plant Manager Browns Ferry Nuclear Plant Tennessee Valley Authority P.O. Box 2000 Decatur, AL 35609

Mr. Jon R. Rupert, Vice President Browns Ferry Unit 1 Restart Browns Ferry Nuclear Plant Tennessee Valley Authority P.O. Box 2000 Decatur, AL 35609

## **BROWNS FERRY NUCLEAR PLANT**

Mr. Robert G. Jones Browns Ferry Unit 1 Plant Restart Manager Browns Ferry Nuclear Plant Tennessee Valley Authority P.O. Box 2000 Decatur, AL 35609

Mr. Scott M. Shaeffer Browns Ferry Unit 1 Project Engineer Division of Reactor Projects, Branch 6 U.S. Nuclear Regulatory Commission 61 Forsyth Street, SW., Suite 23T85 Atlanta, GA 30303-8931

Mr. Fredrick C. Mashburn Senior Program Manager Nuclear Licensing Tennessee Valley Authority 4X Blue Ridge 1101 Market Street Chattanooga, TN 37402-2801

Mr. Timothy E. Abney, Manager Licensing and Industry Affairs Browns Ferry Nuclear Plant Tennessee Valley Authority P.O. Box 2000 Decatur, AL 35609

Senior Resident Inspector U.S. Nuclear Regulatory Commission Browns Ferry Nuclear Plant 10833 Shaw Road Athens, AL 35611-6970

State Health Officer Alabama Dept. of Public Health RSA Tower - Administration Suite 1552 P.O. Box 303017 Montgomery, AL 36130-3017

Chairman Limestone County Commission 310 West Washington Street Athens, AL 35611