

Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

March 28, 2007

10 CFR 50.75(f)(1)

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555-0001

Gentlemen:

In the Matter of )	Docket Nos	50-259	50-327
Tennessee Valley Authority )		50-260	50-328
		50-296	50-390

TVA - DECOMMISSIONING FUNDING STATUS REPORT - BROWNS FERRY (BFN), SEQUOYAH (SQN), AND WATTS BAR (WBN) NUCLEAR PLANTS

Pursuant to the requirements of 10 CFR 50.75(f)(1), TVA is required to report to NRC on a calendar year basis, beginning on March 31, 1999, and every two years thereafter, on the status of decommissioning funding for each reactor owned by TVA. This report addresses the decommissioning funding status for BFN Units 1, 2, and 3; SQN Units 1 and 2; and WBN Unit 1.

The reporting requirements and corresponding TVA information are provided below.

1. The minimum decommissioning fund estimate, pursuant to 10 CFR 50.75 (b) and (c).

Decommissioning cost estimates were calculated pursuant to the formulas in 10 CFR 50.75(c). Burial cost adjustment factors were taken from NUREG-1307 R12 for the "Non-Atlantic Compact, Direct Disposal with vendor" option. Bureau of Labor Statistics and Energy indices were taken from the web sites referenced by the NUREG at the end of the 2006 calendar year. The estimates in calendar year 2006 dollars are as follows:

Decommissioning Cost Estimates (2006 End-of-Year Dollars, Millions)									
Plant	Units	Cost Per Unit	Total Plant Cost						
Browns Ferry	3	516.7	1550.1						
Sequoyah	2	366.1	732.2						
Watts Bar	1	366.1	366.1						

2. The amount accumulated in the TVA Decommissioning Fund at the end of the calendar year 2006 for items included in 10 CFR 50.75 (b) and (c).

Decommissi	oning Trust Fund						
(2006 End-of-Ye	(2006 End-of-Year Dollars, Millions)						
Plant	Balance Per Plant						
Browns Ferry Unit 1	162.7						
Browns Ferry Unit 2	155.0						
Browns Ferry Unit 3	140.5						
Sequoyah Unit 1	224.3						
Sequoyah Unit 2	213.5						
Watts Bar Unit 1	107.8						

3. A schedule of the annual amounts remaining to be collected for items in 10 CFR 50.75 (b) and (c).

As was described in TVA's letter of October 30, 2003, TVA has established a method to provide funding assurance on an ongoing basis. This method essentially establishes a projection of necessary funds at the end of each year based upon current decommissioning cost estimates and assumptions regarding escalation and rate of earnings. Each year TVA reviews the performance of its decommissioning trust fund. If funds fall below an established threshold of 95 percent of projected value, TVA will make contributions to the trust fund or provide other methods of funding assurance to ensure adequate funding.

The tables attached to TVA's October 30, 2003, letter have been updated for the current calculated obligations and expressed in current (2006) dollars. These updated tables are provided in Enclosure 1 to this letter. At the end of 2006, the total trust fund balance of \$1,003.9 million was 143.7 percent of the total "Projected Fund Balance" of \$698.5 million. Accordingly, no contributions or other method of funding assurance are necessary at this time.

- 4. The assumptions used regarding escalation in decommissioning cost, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.
  - The assumed escalation in decommissioning costs is 4 percent.
  - TVA assumed a projected annual real rate of return on decommissioning funds of 5 percent, as authorized by the TVA Board of Directors, TVA's rate-making authority. This rate is consistent with the long-term historical investment return associated with U.S. equities.

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5. Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(l)(v).

None.

6. Any modifications to a licensee's current method of providing financial assurance occurring since the last submitted report.

None.

7. Any material changes to trust agreements.

TVA's Third Amendment to the TVA Master Decommissioning Trust Agreement is included as Enclosure 2 to this letter.

If you have any questions regarding this response, please call Fred Mashburn at (423) 751-8817 in Chattanooga.

Sincerely,

Original signed by

Robert H. Bryan, Jr. General Manager, Corporate Nuclear Licensing and Industry Affairs

Enclosures cc: See page 4 U. S. Nuclear Regulatory Commission Page 4 March 28, 2007

cc (Enclosures):

Ms. Eva A. Brown, Project Manager U. S. Nuclear Regulatory Commission MS 08G9 One White Flint North 11555 Rockville Pike Rockville, Maryland 20852-2739

Ms. Margaret H. Chernoff, Senior Project Manager U.S. Nuclear Regulatory Commission MS 08G9 One White Flint North 11555 Rockville Pike Rockville, Maryland 20852-2739

Mr. Brendan T. Moroney, Senior Project Manager U.S. Nuclear Regulatory Commission MS 08G9 One White Flint North 11555 Rockville Pike Rockville, Maryland 20852-2739

Mr. William Travers, Regional Administrator U.S. Nuclear Regulatory Commission Region II Sam Nunn Atlanta Federal Center 61 Forsyth St., SW, Suite 23T85 Atlanta, Georgia 30303-8931

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### Enclosure 1

	SQN1			SQN2			WBN1		
	Decom.	Trust Fund		Decom.	Trust Fund		Decom.	Trust Fund	
Year	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance
2006	\$0.0	\$0.0	\$153.8	\$0.0	\$0.0	\$146.5	\$0.0	\$0.0	\$74.0
2007	\$0.0	\$0.0	\$161.5	\$0.0	\$0.0	\$153.8	\$0.0	\$0.0	\$77.7
2008	\$0.0	\$0.0	\$169.6	\$0.0	\$0.0	\$161.5	\$0.0	\$0.0	\$81.6
2009	\$0.0	\$0.0	\$178.1	\$0.0	\$0.0	\$169.6	\$0.0	\$0.0	\$85.7
2010	\$0.0	\$0.0	\$187.0	\$0.0	\$0.0	\$178.1	\$0.0	\$0.0	\$89.9
2011	\$0.0	\$0.0	\$196.3	\$0.0	\$0.0	\$187.0	\$0.0	\$0.0	\$94.4
2012	\$0.0	\$0.0	\$206.1	\$0.0	\$0.0	\$196.3	\$0.0	\$0.0	\$99.2
2013	\$0.0	\$0.0	\$216.4	\$0.0	\$0.0	\$206.1	\$0.0	\$0.0	\$104.1
2014	\$0.0	\$0.0	\$227.3	\$0.0	\$0.0	\$216.4	\$0.0	\$0.0	\$109.3
2015	\$0.0	\$0.0	\$238.6	<u>\$0.0</u>	\$0.0	\$227.3	\$0.0	\$0.0	\$114.8
2016	\$0.0	\$0.0	\$250.6	\$0.0	\$0.0	\$238.6	\$0.0	\$0.0	\$120.5
2017	\$0.0	\$0.0	\$263.1	\$0.0	\$0.0	\$250.6	\$0.0	\$0.0	\$126.6
2018	\$0.0	\$0.0	\$276.3	\$0.0	\$0.0	\$263.1	\$0.0	\$0.0	\$132.9
2019	\$0.0	\$0.0	\$290.1	\$0.0	\$0.0	\$276.3	\$0.0	\$0.0	\$139.5
2020	\$11.0		\$293.6	\$0.0	\$0.0	\$290.1	\$0.0	\$0.0	\$146.5
2021	\$50.7		\$257.5	\$11.0		\$293.6	\$0.0	\$0.0	\$153.8
2022	\$50.7		\$219.7	\$50.7		\$257.5	\$0.0	\$0.0	\$161.5
2023	\$50.7		\$179.9	\$50.7		\$219.7	\$0.0	\$0.0	\$169.6
2024	\$50.7		\$138.2	\$50.7		\$179.9	\$0.0	\$0.0	\$178.1
2025	\$50.7		\$94.3	\$50.7		\$138.2	\$0.0	\$0.0	\$187.0
2026	\$50.7		\$48.3	\$50.7		\$94.3	\$0.0	\$0.0	\$196.3
2027	\$50.7		\$0.0	\$50.7		\$48.3	\$0.0	\$0.0	\$206.1
2028				\$50.7		\$0.0	\$0.0	\$0.0	\$216.4
2029							\$0.0	\$0.0	\$227.3
2030							\$0.0	\$0.0	\$238.6

## Enclosure 1

	SQN1			SQN2			WBN1		
	Decom.	Trust Fund		Decom.	Trust Fund		Decom.	Trust Fund	
Year	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance
2031							\$0.0	\$0.0	\$250.6
2032				· · · · · · · · · · · · · · · · · · ·			\$0.0	\$0.0	\$263.1
2033							\$0.0	\$0.0	\$276.3
2034							\$0.0	\$0.0	\$290.1
2035							\$11.0		\$293.6
2036							\$50.7		\$257.5
2037							\$50.7		\$219.7
2038							\$50.7		\$179.9
2039							\$50.7		\$138.2
2040							\$50.7		\$94.3
2041							\$50.7		\$48.3
2042							\$50.7		. \$0.0
2043									
Total	\$366.1			\$366.1			\$366.1		

		BFN1			BFN2			BFN3			
	Decom.	Decom. Trust Fund		Decom.	Trust	Fund	Decom.	Tı	rust Fund		
Year	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance		
2006	\$0.0	\$0.0	\$115.1	\$0.0	\$0.0	\$109.6	\$0.0	\$0.0	\$99.4		
2007	\$0.0	\$0.0	\$120.9	\$0.0	\$0.0	\$115.1	\$0.0	\$0.0	\$104.4		
2008	\$0.0	\$0.0	\$126.9	\$0.0	\$0.0	\$120.9	\$0.0	\$0.0	\$109.6		
2009	\$0.0	\$0.0	\$133.3	\$0.0	\$0.0	\$126.9	\$0.0	\$0.0	\$115.1		
2010	\$0.0	\$0.0	\$139.9	\$0.0	\$0.0	\$133.3	\$0.0	\$0.0	\$120.9		
2011	\$0.0	\$0.0	\$146.9	\$0.0	\$0.0	\$139.9	\$0.0	\$0.0	\$126.9		
2012	\$0.0	\$0.0	\$154.3	\$0.0	\$0.0	\$146.9	\$0.0	\$0.0	\$133.3		
2013	\$0.0	\$0.0	\$162.0	\$0.0	\$0.0	\$154.3	\$0.0	\$0.0	\$139.9		
2014	\$0.0	\$0.0	\$170.1	\$0.0	\$0.0	\$162.0	\$0.0	\$0.0	\$146.9		
2015	\$0.0	\$0.0	\$178.6	\$0.0	\$0.0	\$170.1	\$0.0	\$0.0	\$154.3		
2016	\$0.0	\$0.0	\$187.5	\$0.0	\$0.0	\$178.6	\$0.0	\$0.0	\$162.0		
2017	\$0.0	\$0.0	\$196.9	\$0.0	\$0.0	\$187.5	\$0.0	\$0.0	\$170.1		
2018	\$0.0	\$0.0	\$206.7	\$0.0	\$0.0	\$196.9	\$0.0	\$0.0	\$178.6		
2019	\$0.0	\$0.0	\$217.1	\$0.0	\$0.0	\$206.7	\$0.0	\$0.0	\$187.5		
2020	\$0.0	\$0.0	\$227.9	\$0.0	\$0.0	\$217.1	\$0.0	\$0.0	\$196.9		
2021	\$0.0	\$0.0	\$239.3	\$0.0	\$0.0	\$227.9	\$0.0	\$0.0	\$206.7		
2022	\$0.0	\$0.0	\$251.3	\$0.0	\$0.0	\$239.3	\$0.0	\$0.0	\$217.1		
2023	\$0.0	\$0.0	\$263.9	\$0.0	\$0.0	\$251.3	\$0.0	\$0.0	\$227.9		
2024	\$0.0	\$0.0	\$277.0	\$0.0	\$0.0	\$263.9	\$0.0	\$0.0	\$239.3		
2025	\$0.0	\$0.0	\$290.9	\$0.0	\$0.0	\$277.0	\$0.0	\$0.0	\$251.3		
2026	\$0.0	\$0.0	\$305.4	\$0.0	\$0.0	\$290.9	\$0.0	\$0.0	\$263.9		
2027	\$0.0	\$0.0	\$320.7	\$0.0	\$0.0	\$305.4	\$0.0	\$0.0	\$277.0		
2028	\$0.0	\$0.0	\$336.8	\$0.0	\$0.0	\$320.7	\$0.0	\$0.0	\$290.9		
2029	\$0.0	\$0.0	\$353.6	\$0.0	\$0.0	\$336.8	\$0.0	\$0.0	\$305.4		
2030	\$0.0	\$0.0	\$371.3	\$0.0	\$0.0	\$353.6	\$0.0	\$0.0	\$320.7		
2031	\$0.0	\$0.0	\$389.8	\$0.0	\$0.0	\$371.3	\$0.0	\$0.0	\$336.8		
2032	\$0.0	\$0.0	\$409.3	\$0.0	\$0.0	\$389.8	\$0.0	\$0.0	\$353.6		
2033	\$15.5		\$414.3	\$0.0	\$0.0	\$409.3	\$0.0	\$0.0	\$371.3		
2034	\$71.6		\$363.4	\$15.5	· ·····	\$414.3	\$0.0	\$0.0	\$389.8		
2035	\$71.6		\$310.0	\$71.6		\$363.4	\$0.0	\$0.0	\$409.3		
2036	\$71.6		\$253.9	\$71.6		\$310.0	\$15.5		\$414.3		
2037	\$71.6		\$195.0	\$71.6		\$253.9	\$71.6		\$363.4		
2038	\$71.6		\$133.1	\$71.6		\$195.0	\$71.6		\$310.0		

Enclosure	1
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		BFN1		BFN2			BFN3			
	Decom.	Decom. Trust Fund		om. Trust Fund Decom. Trust Fund		Decom.	Trust Fund			
Year	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance	Annual Disbursement	*Annual Funding Assurance	End of Year Projected Fund Balance	
2039	\$71.6		\$68.2	\$71.6		\$133.1	\$71.6		\$253.9	
2040	\$71.6		\$0.0	\$71.6		\$68.2	\$71.6		\$195.0	
2041				\$71.6		\$0.0	\$71.6		\$133.1	
2042							\$71.6		\$68.2	
2043							\$71.6		\$0.0	
Total	\$516.7			\$516.7			\$516.7		· · · · · · · · · · · · · · · · · · ·	

Note: All amounts in millions of dollars

All dollars in real dollars

\*Each unit's trust fund balance exceeded the net present value of its respective decommissioning liability. Accordingly, there is no deficit upon which to calculate any contributions or to provide any other method of decommissioning funding assurance at this time.

#### ENCLOSURE 2

# THIRD AMENDMENT TO THE TENNESSEE VALLEY AUTHORITY MASTER DECOMMISSIONING TRUST AGREEMENT

This Third Amendment to the Tennessee Valley Authority Master Decommissioning Trust Agreement made as of the 25th day of May, 2006, between the TENNESSEE VALLEY AUTHORITY, a corporate agency and instrumentality of the United States, created and existing pursuant to the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. §§ 831-831ee (2000 & Supp. III 2003), amended by Consolidated Appropriations Act, 2005, Pub. L. No. 108-447, div. C, tit. VI, 118 Stat. 2809, 2963 ("TVA") and MELLON BANK, N.A. (the "Trustee").

#### RECITALS

WHEREAS, TVA and the Trustee entered into the Tennessee Valley Authority Master Decommissioning Trust Agreement as of August 18, 2000 (as amended as of July 19, 2002, and December 17, 2003, the "Agreement"); and

WHEREAS, TVA and the Trustee wish to amend the Agreement pursuant to section 10.05 of the Agreement to clarify the authority and power of each Investment Manager heretofore or hereafter appointed pursuant to the Trust Agreement and to make other clarifying changes.

NOW, THEREFORE, in consideration of the mutual promise herein contained, TVA and the Trustee hereby agree to amend the Agreement as follows:

1. Section 1.01(15) is amended and restated in its entirety to read as follows:

"(15) "Investment Manager Agreement" shall mean an agreement

(including, but not limited to, subscription agreements, subordinate trust agreements, and fee agreements) executed by TVA pursuant to which TVA appoints an Investment Manager to manage the investment of all or a portion of the Master Trust or any Fund."

2. Section 2.07 is revised by adding "or TVA's Chief Financial Officer" after "TVA Board of Directors" each time that the phrase "TVA Board of Directors" appears in such section.

3. The third to last sentence of Section 7.01 is revised by inserting ", if requested by the Trustee," between "shall" and "certify" each time that the phrase "shall certify" appears in such section.

4. The second to last sentence of Section 7.01 is revised by replacing the word "all" with the word "any".

5. The first sentence of Section 7.03 is amended and restated in its entirety to read as follows:

"Notwithstanding anything herein to the contrary, the Trustee shall screen all investment transactions of the Investment Manager (except for investments tied to market indexes or other non-nuclear mutual funds, collective, common or pooled trust funds, or futures, options, swaps or other derivative or non-traditional investments) for compliance with any investment requirements, standards, and guidelines communicated by TVA in writing to the Trustee under Section 7.01; provided that the Trustee's obligation to screen investment transactions shall be limited to screening based upon CUSIP numbers or other generally recognized similar security identifier."

6. A new Section 7.04 is added that reads as follows:

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"7.04 Powers of Investment Manager. (a) Unless TVA gives written notice

to the Trustee to the contrary, each Investment Manager appointed by TVA with respect to assets of any portion of the Master Trust or any Fund (such assets being referred to herein as the "Investment Manager's Account") has and shall have, subject to the terms and conditions of the applicable Investment Manager Agreement, complete and absolute discretionary power and authority with respect to the management, investment, disposition and reinvestment of the assets in the Investment Manager's Account, including without limitation the power and authority to execute and deliver all agreements, documents and certificates, exercise all power and authority with respect to the establishment, maintenance and closing of brokerage, trading, margin and other accounts and take all other actions, in each case with respect to the Investment Manager's Account, as the Investment Manager determines to be necessary or appropriate to the exercise of such power and authority. Notwithstanding the foregoing, the Investment Manager's authority to commit, bind or subject the assets of any portion of the Master Trust or any Fund to any contractual liability shall be limited to the assets in the Investment Manager's Account except to the extent that TVA has, in the Investment Manager Agreement between TVA and the Investment Manager, specifically authorized the Investment Manager to commit, bind or subject other assets of the Master Trust or any Fund to contractual liability.

(b) TVA shall use its best efforts to cause each Investment Manager to report all actions taken, and transactions effected, on behalf of the Master Trust or any Fund to the Trustee pursuant to such procedures as may be established by the Trustee and communicated to the Investment Manager. TVA shall use its best efforts to cause each Investment Manager to provide such information and documentation to the Trustee and/or TVA as either of them may reasonably request. The Trustee shall not be responsible or liable for any actions taken or transactions effected by the Investment Manager,

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and, except as otherwise provided in Section 7.03, shall have no responsibility to review, evaluate or monitor any such actions or transactions, or any agreements, documents and certificates delivered to the Trustee by the Investment Manager. Except as otherwise provided in Section 7.03, it shall be the responsibility of TVA to monitor the Investment Manager. TVA hereby expressly understands and agrees that the Investment Manager shall have no authority to make representations on behalf of, or to otherwise bind, the Trustee."

7. Section 8.04 is revised by adding the following after "this Master Trust" and before the period at the end of the sentence:

", and, at the direction of TVA, to appoint subtrustees".

8. A new Section 8.07 is added that reads as follows:

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- "8.07 <u>Additional Actions</u>. At the written direction of TVA, to enter into agreements or take other actions on behalf of the Trust that the Trustee shall deem proper to facilitate or effectuate the investments of an Investment Manager."
- 9. The phrase "(iv) or" in Section 9.02 is revised to read "; or (iv)".
- 10. Section 9.06 is amended and restated in its entirety to read as follows:
  - "9.06. <u>Futures. options, swaps, and other derivative instruments</u>. To purchase, enter into, sell, hold, and generally deal in any manner in and with contracts for the immediate or future delivery of financial instruments of any issuer or of any other property; to grant, purchase, sell, exercise, permit to expire, permit to be held in escrow, and otherwise to acquire, dispose of, hold, and generally deal in any manner with and in all forms of swaps, options and other derivative investments in any combination."
- 11. TVA's notice address in Section 10.04 is revised to read: "John M. Hoskins,

Senior Vice President, Treasurer/Investor Relations, Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, TN 37902-1401".

12. The first sentence of Section 10.09 is revised to read as follows:

In administering this Agreement, the Trustee shall comply with the following conditions and certifications to the extent applicable: (i) the Equal Opportunity for Special Disabled Veterans and Veterans of the Vietnam Era clause, 41 C.F.R. § 60-250.5, (ii) the Equal Opportunity for Workers with Disabilities clause, 41 C.F.R. § 60-741.5, (iii) the Equal Employment Opportunity clause, 41 C.F.R. § 60-1.4, (iv) the Anti-Kickback Procedures clause, 18 C.F.R. § 1316.3, (v) the Discrimination on the Basis of Age clause, 18 C.F.R. § 1316.6, (vi) the Drug-Free Workplace clause, 18 C.F.R. § 1316.7, and (vii) the Officials Not to Benefit clause, 18 C.F.R. § 1316.10, and all amendments to these clauses and all applicable regulations, rules, and orders issued thereunder.

Each party represents and warrants to the other party that it has full authority to enter into this Amendment upon the terms and conditions hereof and that the individual executing this Amendment on its behalf has the requisite authority to bind such party to this Amendment.

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As so amended and clarified hereby, the Trust Agreement is herby confirmed.

IN WITNESS WHEREOF, the parties hereto have executed this instrument as of the 25th day of May, 2006.

Authorized Signer of: Tennessee Valley Authority

By: <u>Emi Dovi</u> Name: Eric J. Davis

Name: Eric J. Davis Title: Senior Financial Analyst Date: <u>5/15/06</u>

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Authorized Signer of: Mellon Bank, N. A.

By: Uichi G. Caldan Name: VICKI A- CALDAN

Title: VICE fRESOEUTDate: S/2-S/06

5/18/06\Customer\Manager Signatures\TVA\NDT Amendment - 05-18-06