

Plant name: Brown's Ferry Nuclear Power Station, Unit 1

Docket Number: 50-259

1

The minimum financial assurance (MFA) estimate pursuant to 10 CFR 50.75(b) & (c):

\$609,100,000

Did the licensee identify the amount of estimated radiological funds? (Y/N)

Y

2

The total amount of dollars accumulated at the end of the appropriate year: (see below)

Licensee:	% Owned:	Category:	Amount in Trust Fund:
TVA	100.00%	1	\$164,952,588

Total Trust Fund Balance

\$164,952,588

3

Schedule of the annual amounts remaining to be collected: (provided/none)

provided

4

Assumptions used in determining rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections: (see below)

Rate of Return on Earnings	Escalation Rate	Rate(s) of Other Factors	Real Rate of Return	PUC Verified (Y/N)	Allowed through Decom (Y/N)	RAI Needed (Y/N)	Post-RAI		
							PUC Verified (Y/N)	Allowed through Decom (Y/N)	Rates Determined (Y/N)
9.00%	4.00%		5.00%	N	Y	Y	Y	Y	

5

Any contracts upon which the licensee is relying? (Y/N)

N

6

Any modifications to a licensee's method of providing decommissioning funding assurance? (Y/N)

N

7

Any material changes to trust agreements? (Y/N)

N

If a change has occurred, the reviewer will document on this sheet that a change has occurred and identify the reviewer who will evaluate the change: (see below)

Plant name: Brown's Ferry Nuclear Power Station, Unit 1 Docket Number: 50-259

Date of Operation: Month: 12 Day: 31 Year: 2010  
Termination of Operations: 12 20 2033

BWR/PWR	MWth	1986\$	ECI	Base Lx		Lx	Px	Latest Month Px	Base Px	Fx	Latest Month Fx	Base Fx		Ex		Bx
BWR	3458	\$135,000,000	112.8	1.98	0.65	2.23	1.676	191.4	114.2	3.049	250.0	82.0	0.13	2.307	0.22	12.54

NRC Minimum: \$608,918,683 Site Specific:

Licensee:	% Owned:	Category	Amount of NRC Minimum/Site Specific:	Amount in Trust Fund:
TVA	100.00%	1	\$608,918,683	\$164,952,588
			Total Fund Balance:	\$164,952,588

Step 1:  
Earnings Credit:

Trust Fund Balance:	Real Rate of Return per year	Years Left in License	Total Earnings:	Does Licensee Pass:
\$164,952,588	2%	22.97	\$259,958,427	NO

Step 2:  
Accumulation:

Value of Annuity per year (amount/See Annuity Sheet)	Real Rate of Return per year	Number of Annual Payments:	Total Annuity:
see annuity sheet	See Annuity Sheet		See Total Step 2
Total Annuity	Real Rate of Return per year	Years remaining after annuity	Total Step 2:
See Total Step 2	See Annuity Sheet	N/A	\$104,544,164

Total Step 1 + Step 2	Does Licensee Pass:
\$364,502,591	NO

Step 3:  
Decom Period:

Total Earnings:	Real Rate of Return per year	Decom Period:	Total Earnings for Decom:
\$364,502,591	2%	7	\$27,098,156

Total of Steps 1 thru 3:	Does Licensee Pass:	Shortfall:
\$391,600,747	NO	(\$217,317,936)

Signature: Shawn W. Harwell Date: 6/29/11  
Signature: Aaron L. Szabo  
Date: 7/6/2011

Spreadsheet created by: Aaron Szabo, Shawn Harwell  
Formulas verified by: Clayton Pittiglio

Plant name:Brown's Ferry Nuclear Power Station, Unit 1Docket Number:50-259

Date of Operation:Month:12Day:31Year:2010

Termination of Operations:12202033

If licensee is granted greater than 2% RRR

Step 4: Earnings Credit:				
Trust Fund Balance:	Real Rate of Return per year	Years Left in License	Total Earnings:	Does Licensee Pass:
\$164,952,588	5.00%	22.97	\$505,911,359	NO

Step 5: Accumulation:			
Value of Annuity per year	Real Rate of Return per year	Number of Annual Payments:	Total Annuity:
see annuity sheet	See Annuity Sheet	0	See Total Step 4
Total Annuity	Real Rate of Return per year	Years remaining after annuity	Total Step 5
See Total Step 4	See Annuity Sheet	N/A	\$159,067,133
Total Step 4 + Step 5			Does Licensee Pass:
\$664,978,493			YES

Step 6: Decom Period:				
Total Earnings:	Real Rate of Return per year	Decom Period:	Total Earnings for Decom:	
\$664,978,493	5.00%	7	\$135,356,513	
Total of Steps 4 thru 6:			Does Licensee Pass:	Shortfall:
\$800,335,005			YES	NO

# ANNUITY

**Termination of Operations:** 1 29 2036

Year	Annuity:	Real Rate of Return:	Total Accumulation
2011	\$3,100,000	2%	\$5,093,887
2012	\$3,100,000	2%	\$4,994,007
2013	\$3,100,000	2%	\$4,896,085
2014	\$3,100,000	2%	\$4,800,083
2015	\$3,100,000	2%	\$4,705,964
2016	\$3,100,000	2%	\$4,613,690
2017	\$3,100,000	2%	\$4,523,226
2018	\$3,100,000	2%	\$4,434,535
2019	\$3,100,000	2%	\$4,347,583
2020	\$3,100,000	2%	\$4,262,337
2021	\$3,100,000	2%	\$4,178,761
2022	\$3,100,000	2%	\$4,096,825
2023	\$3,100,000	2%	\$4,016,495
2024	\$3,100,000	2%	\$3,937,740
2025	\$3,100,000	2%	\$3,860,530
2026	\$3,100,000	2%	\$3,784,833
2027	\$3,100,000	2%	\$3,710,621
2028	\$3,100,000	2%	\$3,637,863
2029	\$3,100,000	2%	\$3,566,533
2030	\$3,100,000	2%	\$3,496,601
2031	\$3,100,000	2%	\$3,428,040
2032	\$3,100,000	2%	\$3,360,823
2033	\$3,100,000	2%	\$3,294,925
2034	\$3,100,000	2%	\$3,230,318
2035	\$3,100,000	2%	\$3,166,979
2036	\$3,100,000	2%	\$3,104,881

**Total: \$104,544,164**

Signature : Kosmas Lois

Date: 7/6/2011

Secondary Signature: Jo Ann Simpson

Date: 07/13/2011

Spreadsheet created by: Aaron Szabo, Shawn Harwell

Formulas verified by: Clayton Pittiglio

# ANNUITY

**Termination of Operations:** 1 29 2036

If licensee is granted greater than 2% RRR

Year	Annuity:	Real Rate of Return:	Total Accumulation
2011	\$3,100,000	5.00%	\$10,538,473
2012	\$3,100,000	5.00%	\$10,036,641
2013	\$3,100,000	5.00%	\$9,558,706
2014	\$3,100,000	5.00%	\$9,103,530
2015	\$3,100,000	5.00%	\$8,670,028
2016	\$3,100,000	5.00%	\$8,257,170
2017	\$3,100,000	5.00%	\$7,863,971
2018	\$3,100,000	5.00%	\$7,489,496
2019	\$3,100,000	5.00%	\$7,132,854
2020	\$3,100,000	5.00%	\$6,793,194
2021	\$3,100,000	5.00%	\$6,469,708
2022	\$3,100,000	5.00%	\$6,161,627
2023	\$3,100,000	5.00%	\$5,868,216
2024	\$3,100,000	5.00%	\$5,588,777
2025	\$3,100,000	5.00%	\$5,322,645
2026	\$3,100,000	5.00%	\$5,069,186
2027	\$3,100,000	5.00%	\$4,827,796
2028	\$3,100,000	5.00%	\$4,597,901
2029	\$3,100,000	5.00%	\$4,378,953
2030	\$3,100,000	5.00%	\$4,170,432
2031	\$3,100,000	5.00%	\$3,971,840
2032	\$3,100,000	5.00%	\$3,782,705
2033	\$3,100,000	5.00%	\$3,602,576
2034	\$3,100,000	5.00%	\$3,431,025
2035	\$3,100,000	5.00%	\$3,267,642
2036	\$3,100,000	5.00%	\$3,112,040

**Total: \$159,067,133**

Signature : Kosmas Lois

Date: 7/6/2011

Secondary Signature: Jo Ann Simpson

Date: 07/13/2011

Spreadsheet created by: Aaron Szabo, Shawn Harwell

Formulas verified by: Clayton Pittiglio