

**Ameren Missouri
Callaway Energy Center Tax-Qualified Nuclear Decommissioning Trust Fund Projection
Missouri Jurisdiction
Decommissioning Expense Calculation**

Decommissioning Cost Estimate

License Termination Decommissioning Expenditures		
Site Restoration Decommissioning Expenditures	786,425,000	
Site Restoration Decommissioning Expenditures	50,362,000	
Total Decommissioning Cost Estimate:	\$ 836,787,000	
Estimate in Terms of Year xxxx Dollars		
	2017	
	\$ 836,787,000	

Estimate Based On: August 2017 TLG Study / 4.0519%
Decommissioning Initiation: August 2017 TLG Study / 4.0519%

Year	PLANT DECOMMISSIONING				ISFSI DECOMMISSIONING				COMBINED	
	2017 Decommissioning Expenses	# of Years of Initiation	Inflation Factor At Decommissioning Initiation Rate	(Inflated \$) Decommissioning Expenses	2017 Decommissioning Expenses	# of Years of Initiation	Inflation Factor At Decommissioning Initiation Rate	(Inflated \$) Decommissioning Expenses	(Inflated \$) Decommissioning Expenses	(Inflated \$) Decommissioning Expenses

TOTALS:	\$ 836,787,000			\$ 1,177,105,726	\$ 9,159,000			\$ 34,716,486	\$ 3,211,324,241	
2017	\$ -	0	1.0000	\$ -	\$ -	0	1.0000	\$ -	\$ -	\$ -
2018	\$ -	1	1.0405	\$ -	\$ -	1	1.0405	\$ -	\$ -	\$ -
2019	\$ -	2	1.0827	\$ -	\$ -	2	1.0827	\$ -	\$ -	\$ -
2020	\$ -	3	1.1265	\$ -	\$ -	3	1.1265	\$ -	\$ -	\$ -
2021	\$ -	4	1.1722	\$ -	\$ -	4	1.1722	\$ -	\$ -	\$ -
2022	\$ -	5	1.2201	\$ -	\$ -	5	1.2201	\$ -	\$ -	\$ -
2023	\$ -	6	1.2694	\$ -	\$ -	6	1.2694	\$ -	\$ -	\$ -
2024	\$ -	7	1.3201	\$ -	\$ -	7	1.3201	\$ -	\$ -	\$ -
2025	\$ -	8	1.3722	\$ -	\$ -	8	1.3722	\$ -	\$ -	\$ -
2026	\$ -	9	1.4257	\$ -	\$ -	9	1.4257	\$ -	\$ -	\$ -
2027	\$ -	10	1.4807	\$ -	\$ -	10	1.4807	\$ -	\$ -	\$ -
2028	\$ -	11	1.5371	\$ -	\$ -	11	1.5371	\$ -	\$ -	\$ -
2029	\$ -	12	1.5950	\$ -	\$ -	12	1.5950	\$ -	\$ -	\$ -
2030	\$ -	13	1.6544	\$ -	\$ -	13	1.6544	\$ -	\$ -	\$ -
2031	\$ -	14	1.7153	\$ -	\$ -	14	1.7153	\$ -	\$ -	\$ -
2032	\$ -	15	1.7778	\$ -	\$ -	15	1.7778	\$ -	\$ -	\$ -
2033	\$ -	16	1.8419	\$ -	\$ -	16	1.8419	\$ -	\$ -	\$ -
2034	\$ -	17	1.9076	\$ -	\$ -	17	1.9076	\$ -	\$ -	\$ -
2035	\$ -	18	1.9749	\$ -	\$ -	18	1.9749	\$ -	\$ -	\$ -
2036	\$ -	19	2.0438	\$ -	\$ -	19	2.0438	\$ -	\$ -	\$ -
2037	\$ -	20	2.1143	\$ -	\$ -	20	2.1143	\$ -	\$ -	\$ -
2038	\$ -	21	2.1864	\$ -	\$ -	21	2.1864	\$ -	\$ -	\$ -
2039	\$ -	22	2.2601	\$ -	\$ -	22	2.2601	\$ -	\$ -	\$ -
2040	\$ -	23	2.3354	\$ -	\$ -	23	2.3354	\$ -	\$ -	\$ -
2041	\$ -	24	2.4123	\$ -	\$ -	24	2.4123	\$ -	\$ -	\$ -
2042	\$ -	25	2.4908	\$ -	\$ -	25	2.4908	\$ -	\$ -	\$ -
2043	\$ -	26	2.5709	\$ -	\$ -	26	2.5709	\$ -	\$ -	\$ -
2044	\$ -	27	2.6526	\$ -	\$ -	27	2.6526	\$ -	\$ -	\$ -
2045	\$ -	28	2.7359	\$ -	\$ -	28	2.7359	\$ -	\$ -	\$ -
2046	\$ -	29	2.8208	\$ -	\$ -	29	2.8208	\$ -	\$ -	\$ -
2047	\$ -	30	2.9073	\$ -	\$ -	30	2.9073	\$ -	\$ -	\$ -
2048	\$ -	31	2.9954	\$ -	\$ -	31	2.9954	\$ -	\$ -	\$ -
2049	\$ -	32	3.0851	\$ -	\$ -	32	3.0851	\$ -	\$ -	\$ -
2050	\$ -	33	3.1764	\$ -	\$ -	33	3.1764	\$ -	\$ -	\$ -
2051	\$ -	34	3.2693	\$ -	\$ -	34	3.2693	\$ -	\$ -	\$ -
2052	\$ -	35	3.3638	\$ -	\$ -	35	3.3638	\$ -	\$ -	\$ -
2053	\$ -	36	3.4599	\$ -	\$ -	36	3.4599	\$ -	\$ -	\$ -
2054	\$ -	37	3.5576	\$ -	\$ -	37	3.5576	\$ -	\$ -	\$ -
2055	\$ -	38	3.6569	\$ -	\$ -	38	3.6569	\$ -	\$ -	\$ -
2056	\$ -	39	3.7578	\$ -	\$ -	39	3.7578	\$ -	\$ -	\$ -

Note: TLG could not provide annual cash flow for ISFSI due to limited data. Cash flow for ISFSI was estimated at the total \$1,408,000 estimated cash flow was expended in 2051.

Combined Plant & ISFSI Decommissioning Expenses	\$ 773,506,000	
Combined Plant & ISFSI Decommissioning Expenses	\$ 84,311,000	
Combined Plant & ISFSI Decommissioning Expenses	\$ 161,168,000	
Combined Plant & ISFSI Decommissioning Expenses	\$ 54,205,000	

**Amren Missouri
Callaway Energy Center Tax-Qualified Nuclear Decommissioning Trust Fund Projection
Missouri Jurisdiction
Plant Decommissioning Fund Projection**

June 30, 2017	Fund Balance:	\$ 694,888,944	Equity Allocation:	55.00%	Federal Income Tax Rate:	20.00%
December 31, 2053	EOY Fund Balance:	\$ 6	Bond Allocation:	33.40%	Missouri State Income Tax Rate:	0.00%
			Switch Out of Bonds at End Of Year:	28.63	Percentage of Federal Taxes Deductible on MO Taxes:	0.00%
	Current contribution:	\$ 6,314,620	Net Bond Pct. Tax & Expense Returns:	3.900%	Composite Federal & State Income Tax Rate:	20.000%
	Revised contribution:	\$ 6,323,388	Bonds:	6.600%		
	CPI Inflation:	2.200%	Equities:	6.600%	Management & Trust Fees (BP)	1.50
	Decommissioning Inflation:	4.0019%	Weighted Average - Bonds & Equities:	6.600%		
			Real Pct. Tax & Expense Returns:	1.200%		
			Bonds:	6.600%		
			Equities:	6.600%		
			Weighted Average - Bonds & Equities:	6.600%		

Year Ending December 31, 2006	Beginning-of-Year Balance	Annual Contributions To Fund	Pct Tax & Fee Income	Investment Management & Trust Fees	Federal & State Income Taxes	After Tax & Fee Income	Decommissioning Expenses (Inflated \$)	End-Of-Year Balance
TOTAL	\$ 174,196,447	\$ 3,007,202,207	\$ 77,200,002	\$ 602,004,297	\$ 2,408,017,964	\$ 3,177,160,756	\$	\$ 694,888,944
June 30, 2017	2017	3,157,310	20,742,196	455,100	4,057,413	10,220,633	33,627,532	614,478,917
	2018	6,521,202	42,942,779	950,340	8,596,433	33,627,532	35,156,556	654,178,941
	2019	6,323,386	45,116,597	1,020,310	8,630,460	35,156,556	36,047,744	668,277,936
	2020	6,323,386	48,046,307	1,065,629	9,511,536	36,047,744	40,491,457	740,638,735
	2021	6,323,386	51,731,320	1,164,469	10,115,394	40,491,457	45,669,937	797,423,588
	2022	6,323,386	54,046,690	1,227,117	10,551,618	45,669,937	48,510,396	843,765,456
	2023	6,323,386	56,016,690	1,303,665	11,422,483	48,510,396	51,502,718	893,765,456
	2024	6,323,386	57,003,690	1,394,418	12,750,442	51,502,718	54,646,358	943,609,545
	2025	6,323,386	58,047,940	1,499,545	12,875,679	54,646,358	57,965,116	1,002,407,413
	2026	6,323,386	59,000,740	1,583,396	13,682,000	57,965,116	61,462,200	1,070,695,025
	2027	6,323,386	60,000,740	1,683,396	14,481,379	61,462,200	65,148,725	1,149,481,621
	2028	6,323,386	61,000,740	1,753,172	15,267,437	65,148,725	69,007,758	1,231,315,677
	2029	6,323,386	62,000,740	1,836,637	16,037,431	69,007,758	73,137,254	1,317,459,716
	2030	6,323,386	63,000,740	1,906,446	16,797,425	73,137,254	77,459,716	1,407,776,527
	2031	6,323,386	64,000,740	2,000,446	17,547,425	77,459,716	82,077,268	1,502,407,413
	2032	6,323,386	65,000,740	2,100,446	18,287,425	82,077,268	86,900,331	1,602,407,413
	2033	6,323,386	66,000,740	2,210,446	19,017,425	86,900,331	91,900,331	1,707,407,413
	2034	6,323,386	67,000,740	2,330,446	19,737,425	91,900,331	97,100,331	1,817,407,413
	2035	6,323,386	68,000,740	2,460,446	20,447,425	97,100,331	102,500,331	1,932,407,413
	2036	6,323,386	69,000,740	2,600,446	21,147,425	102,500,331	108,100,331	2,052,407,413
	2037	6,323,386	70,000,740	2,750,446	21,837,425	108,100,331	113,900,331	2,177,407,413
	2038	6,323,386	71,000,740	2,910,446	22,517,425	113,900,331	119,900,331	2,307,407,413
	2039	6,323,386	72,000,740	3,080,446	23,187,425	119,900,331	126,100,331	2,442,407,413
	2040	6,323,386	73,000,740	3,260,446	23,847,425	126,100,331	132,500,331	2,582,407,413
	2041	6,323,386	74,000,740	3,450,446	24,497,425	132,500,331	139,100,331	2,727,407,413
	2042	6,323,386	75,000,740	3,650,446	25,137,425	139,100,331	145,900,331	2,877,407,413
	2043	6,323,386	76,000,740	3,860,446	25,767,425	145,900,331	152,900,331	3,032,407,413
	2044	6,323,386	77,000,740	4,080,446	26,387,425	152,900,331	160,100,331	3,192,407,413
	2045	6,323,386	78,000,740	4,310,446	26,997,425	160,100,331	167,500,331	3,357,407,413
	2046	6,323,386	79,000,740	4,550,446	27,597,425	167,500,331	175,100,331	3,527,407,413
	2047	6,323,386	80,000,740	4,800,446	28,187,425	175,100,331	182,900,331	3,702,407,413
	2048	6,323,386	81,000,740	5,060,446	28,767,425	182,900,331	190,900,331	3,882,407,413
	2049	6,323,386	82,000,740	5,330,446	29,337,425	190,900,331	199,100,331	4,067,407,413
	2050	6,323,386	83,000,740	5,610,446	29,897,425	199,100,331	207,500,331	4,257,407,413
	2051	6,323,386	84,000,740	5,900,446	30,447,425	207,500,331	216,100,331	4,452,407,413
	2052	6,323,386	85,000,740	6,200,446	30,987,425	216,100,331	224,900,331	4,652,407,413
	2053	6,323,386	86,000,740	6,510,446	31,517,425	224,900,331	233,900,331	4,857,407,413
	2054	6,323,386	87,000,740	6,830,446	32,037,425	233,900,331	243,100,331	5,067,407,413
	2055	6,323,386	88,000,740	7,160,446	32,547,425	243,100,331	252,500,331	5,282,407,413

Amtron Missouri
Callaway Energy Center Tax-Qualified Nuclear Decommissioning Trust Fund Projection
Missouri Jurisdiction
Overall Annualized Return Derivation Plant

Amount Remaining in Fund at Completion of Decommissioning: \$ 0
Required Annual Earnings Over Life of Fund: 6.511%

(1) Year Ending	(2) Beginning-of-Year Balance	(3) Contributions To Fund	(4) Pre Tax & Fee Income	(5) Management And Trust Fees	(6) Federal & State Income Taxes	(7) After Tax & Fee Income	(8) Decommissioning Expenses (Inflated \$)	(9) End-of-Year Balance
June 30, 2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	594,889,944
2017	594,889,944	3,157,310	18,417,876	454,633	3,792,648	15,170,564	-	613,217,848
2018	613,217,848	6,321,202	40,132,071	954,687	7,895,481	31,341,923	-	650,880,974
2019	650,880,974	6,323,386	42,584,368	1,013,002	8,314,273	33,267,083	-	690,481,463
2020	690,481,463	6,323,386	46,161,433	1,074,306	8,817,425	35,289,702	-	732,054,560
2021	732,054,560	6,323,386	47,869,537	1,206,127	9,346,162	37,394,648	-	775,762,605
2022	775,762,605	6,323,386	50,715,344	1,296,423	9,901,784	39,607,137	-	821,683,136
2023	821,683,136	6,323,386	53,705,857	1,277,562	10,485,659	41,942,636	-	869,959,170
2024	869,959,170	6,323,386	56,848,432	1,362,318	11,099,223	44,396,892	-	920,679,458
2025	920,679,458	6,323,386	60,150,803	1,450,875	11,743,966	46,975,943	-	973,978,796
2026	973,978,796	6,323,386	63,621,095	1,513,427	12,421,534	49,686,134	-	1,029,988,327
2027	1,029,988,327	6,323,386	67,267,845	1,600,176	13,133,534	52,534,135	-	1,088,845,858
2028	1,088,845,858	6,323,386	71,100,027	1,691,736	13,881,738	55,528,953	-	1,150,696,207
2029	1,150,696,207	6,323,386	75,127,071	1,787,132	14,667,988	58,671,951	-	1,215,691,554
2030	1,215,691,554	6,323,386	79,388,883	1,887,799	15,494,217	61,976,867	-	1,283,991,817
2031	1,283,991,817	6,323,386	83,805,876	1,993,585	16,362,459	65,449,833	-	1,355,765,046
2032	1,355,765,046	6,323,386	88,478,993	2,104,749	17,274,849	69,089,395	-	1,431,167,837
2033	1,431,167,837	6,323,386	93,389,720	2,221,567	18,233,633	72,934,531	-	1,510,445,764
2034	1,510,445,764	6,323,386	98,550,172	2,344,324	19,241,170	76,964,678	-	1,593,733,938
2035	1,593,733,938	6,323,386	103,973,014	2,473,323	20,299,938	81,189,752	-	1,681,256,987
2036	1,681,256,987	6,323,386	109,671,599	2,608,882	21,412,543	85,650,174	-	1,773,230,557
2037	1,773,230,557	6,323,386	115,659,949	2,751,333	22,581,723	90,326,892	-	1,869,880,645
2038	1,869,880,645	6,323,386	121,952,797	2,901,028	23,810,354	95,241,415	-	1,971,445,656
2039	1,971,445,656	6,323,386	128,555,628	3,058,335	25,101,459	100,405,534	-	2,078,174,886
2040	2,078,174,886	6,323,386	135,514,711	3,223,641	26,458,214	105,832,856	-	2,190,331,138
2041	2,190,331,138	6,323,386	142,817,145	3,397,352	27,893,958	111,535,634	-	2,308,190,368
2042	2,308,190,368	6,323,386	150,480,896	3,579,886	29,382,200	117,528,800	-	2,432,042,564
2043	2,432,042,564	6,323,386	158,554,646	3,771,123	30,956,625	123,826,499	-	2,562,192,459
2044	2,562,192,459	6,323,386	166,150,758	3,928,627	32,244,426	128,977,705	-	2,698,803,694
2045	2,698,803,694	6,323,386	173,779,067	4,098,810	33,425,172	132,700,686	-	2,840,022,033
2046	2,840,022,033	6,323,386	181,007,007	4,282,582	34,500,797	137,163,188	-	2,988,380,535
2047	2,988,380,535	6,323,386	188,256,304	4,478,154	35,490,010	142,373,241	-	3,142,426,787
2048	3,142,426,787	6,323,386	195,528,629	4,683,930	36,394,648	148,346,050	-	3,302,486,653
2049	3,302,486,653	6,323,386	202,832,196	4,900,888	37,220,972	154,999,261	-	3,470,884,528
2050	3,470,884,528	6,323,386	210,168,715	5,130,609	37,994,648	162,346,050	-	3,647,884,528
2051	3,647,884,528	6,323,386	217,534,770	5,374,359	38,720,972	170,346,050	-	3,833,884,528
2052	3,833,884,528	6,323,386	224,942,888	5,622,309	39,407,162	178,999,261	-	4,029,884,528
2053	4,029,884,528	6,323,386	232,394,999	5,884,659	40,052,636	188,346,050	-	4,235,884,528
2054	4,235,884,528	6,323,386	239,888,000	6,150,888	40,667,137	198,500,000	-	4,451,884,528
2055	4,451,884,528	6,323,386	247,417,145	6,431,123	41,242,636	209,550,000	-	4,678,884,528
TOTALS		\$ 174,198,647	\$ 3,083,961,565	\$ 73,340,109	\$ 602,004,291	\$ 2,408,017,164	\$ 3,177,105,756	

