

Kentucky Power Company

362 - Station Equipment

**Calculation of Remaining Life
Based Upon Broad Group/Vintage Group Procedures
Related to Original Cost as of December 31, 2004**

Survivor Curve .. IOWA:		30	R0.5			
<u>Year</u> (1)	<u>Age</u> (2)	<u>Surviving Investment</u> (3)	<u>BG/VG Average</u>		<u>ASL Weights</u> (6)=(3)/(4)	<u>RL Weights</u> (7)=(6)*(5)
			<u>Service Life</u> (4)	<u>Remaining Life</u> (5)		
2004	0.5	429,072	30.00	29.69	14,302	424,650
2003	1.5	1,894,746	30.00	29.07	63,158	1,836,131
2002	2.5	728,048	30.00	28.46	24,268	690,578
2001	3.5	2,115,933	30.00	27.84	70,531	1,963,788
2000	4.5	1,776,897	30.00	27.23	59,230	1,612,971
1999	5.5	1,154,441	30.00	26.62	38,481	1,024,552
1998	6.5	903,329	30.00	26.02	30,111	783,467
1997	7.5	1,721,502	30.00	25.42	57,383	1,458,475
1996	8.5	1,914,440	30.00	24.82	63,815	1,583,604
1995	9.5	4,528,130	30.00	24.22	150,938	3,655,262
1994	10.5	1,404,566	30.00	23.62	46,819	1,105,884
1993	11.5	3,416,492	30.00	23.03	113,883	2,622,316
1992	12.5	1,048,094	30.00	22.43	34,936	783,800
1991	13.5	1,609,389	30.00	21.85	53,646	1,171,992
1990	14.5	407,766	30.00	21.26	13,592	288,998
1989	15.5	540,569	30.00	20.68	18,019	372,658
1988	16.5	324,381	30.00	20.11	10,813	217,392
1987	17.5	1,802,903	30.00	19.53	60,097	1,173,949
1986	18.5	1,579,253	30.00	18.97	52,642	998,547
1985	19.5	723,178	30.00	18.41	24,106	443,764
1984	20.5	665,308	30.00	17.86	22,177	395,980
1983	21.5	736,688	30.00	17.31	24,556	425,035
1982	22.5	1,482,602	30.00	16.77	49,420	828,702
1981	23.5	892,404	30.00	16.24	29,747	482,962
1980	24.5	2,567,304	30.00	15.71	85,577	1,344,436
1979	25.5	495,787	30.00	15.19	16,526	251,070
1978	26.5	1,148,752	30.00	14.68	38,292	562,198
1977	27.5	841,945	30.00	14.18	28,065	397,941
1976	28.5	154,083	30.00	13.68	5,136	70,285
1975	29.5	370,883	30.00	13.20	12,363	163,157
1974	30.5	338,222	30.00	12.72	11,274	143,384
1973	31.5	503,705	30.00	12.25	16,790	205,616
1972	32.5	768,573	30.00	11.78	25,619	301,845
1971	33.5	298,370	30.00	11.33	9,946	112,636
1970	34.5	207,636	30.00	10.88	6,921	75,271

1969	35.5	34,268	30.00	10.43	1,142	11,917
1968	36.5	141,216	30.00	10.00	4,707	47,055
1967	37.5	118,552	30.00	9.57	3,952	37,805
1966	38.5	57,193	30.00	9.14	1,906	17,430
1965	39.5	1,206	30.00	8.72	40	351
1964	40.5	22,891	30.00	8.31	763	6,342
1963	41.5	72,112	30.00	7.90	2,404	18,998
1962	42.5	10,264	30.00	7.50	342	2,566
1961	43.5	28,679	30.00	7.10	956	6,786
1960	44.5	15,707	30.00	6.70	524	3,508
1959	45.5	0	30.00	6.30	0	0
1958	46.5	0	30.00	5.91	0	0
1957	47.5	20,361	30.00	5.51	679	3,742

42,017,840

1,400,595 30,129,794

AVERAGE SERVICE LIFE 30.00
AVERAGE REMAINING LIFE 21.51

Kentucky Power Company

364 - Poles, Towers & Fixtures

Company Notes

The simulation analyses indicate that an average service life of 28 years continues to be appropriate for this account. However, the dispersion type should be changed to an R.O.5

Distribution poles are replaced more frequently than transmission poles and there is a possibility that the equipment attached to the poles will experience reuse salvage. However, the labor and transportation costs involved in pole replacements are significant. The recommendation is for a gross salvage of 25% and a removal cost of 65%.

Sk Notes

Account analyzed with SPR model - Use company recommendation

**KPSC Case No. 2005-00341
KCTA First Set Data Request
Dated November 10, 2005
Item No. 14
Page 1 of 1**

Kentucky Power Company

REQUEST

Provide the accumulated depreciation reserve recorded in the Company's books for account 364

RESPONSE

The accumulated depreciation reserve recorded in the Company's books for account 364 as of June 30, 2005 is \$38,113,935.88.

**KPSC Case No. 2005-00341
KCTA First Set Data Request
Dated November 10, 2005
Item No. 19
Page 1 of 1**

Kentucky Power Company

REQUEST

What is your justification for subtracting a figure for "capital leases" from the depreciation reserve for Accounts 364, 365 and 369?

RESPONSE

The Company does not have any capital leases related to Accounts 364, 365, or 369. (Please see the Company's response to Item No. 20 of KCTA-1st Set).

SPR Results
Kentucky Power Company
Account: 364 - Poles, Towers & Fixtures

Curve	Life	Sum of Squared Differences	Index of Variation
BAND: 1936 - 2004			
O3	45	2.63E+14	58
O2	34	2.73E+14	59
O1	31	2.88E+14	60
R0.5	28	2.93E+14	61
R1	26	3.14E+14	63
S-0.5	28	3.28E+14	64
L0	31	3.48E+14	66
R1.5	25	3.60E+14	67
S0	26	3.86E+14	70
O4	55	3.88E+14	70
L0.5	29	3.95E+14	71
S0.5	25	4.30E+14	74
R2	24	4.37E+14	74
L1	27	4.47E+14	75
S1	24	4.95E+14	79
L1.5	26	5.09E+14	80
R2.5	23	5.18E+14	81
S1.5	23	5.65E+14	84
L2	24	5.89E+14	86
S2	23	6.37E+14	90
R3	22	6.38E+14	90
L3	23	7.03E+14	94
S3	22	7.68E+14	98
R4	22	8.05E+14	101
L4	22	8.35E+14	103
S4	22	9.41E+14	109
L5	21	9.89E+14	112
R5	21	9.96E+14	112
S5	21	1.04E+15	114
S6	21	1.11E+15	118
SQ	21	1.18E+15	122

Minimum Equipment Life Expectancy: 3
 Maximum Equipment Life Expectancy: 55
 Life Expectancy Increment: 1
 Begin Year: 1936
 End Year: 2004
 Year Fit Increment: 0

Plant Balances

Year	Balance	Year	Balance	Year	Balance	Year	Balance
2004	124,672,243	2003	123,330,114	2002	120,551,271	2001	117,407,710
2000	112,318,657	1999	107,584,560	1998	100,614,276	1997	99,437,720
1996	98,805,344	1995	90,241,421	1994	86,380,193	1993	80,104,869
1992	76,181,926	1991	71,461,588	1990	66,853,955	1989	63,822,842
1988	62,339,240	1987	59,478,550	1986	55,758,917	1985	51,827,533
1984	47,855,628	1983	44,350,841	1982	40,680,310	1981	36,650,921
1980	32,100,748	1979	28,009,846	1978	24,764,633	1977	22,054,889
1976	19,371,485	1975	17,430,153	1974	16,077,183	1973	14,823,789
1972	13,668,621	1971	12,706,008	1970	11,791,426	1969	11,220,285
1968	10,765,449	1967	10,353,173	1966	9,909,888	1965	9,530,398
1964	9,139,914	1963	8,826,919	1962	8,588,126	1961	8,365,101
1960	8,063,867	1959	7,865,712	1958	7,628,209	1957	7,313,963
1956	6,994,760	1955	6,728,206	1954	6,511,450	1953	6,294,392
1952	6,059,928	1951	5,770,306	1950	5,322,154	1949	4,747,249
1948	4,114,809	1947	3,251,881	1946	2,288,966	1945	1,471,332
1944	1,309,796	1943	1,263,729	1942	1,266,853	1941	1,154,043
1940	1,084,640	1939	961,766	1938	868,275	1937	868,340
1936	861,093						

Simulated Balances

Curve: O3 ASL: 45 SSD: 2.63E+14 IV: 58

Year	Balance	Year	Balance	Year	Balance	Year	Balance
2004	119,029,309	2003	117,001,954	2002	115,987,679	2001	114,236,515
2000	110,166,753	1999	106,303,975	1998	100,781,154	1997	100,680,151
1996	100,644,390	1995	93,002,500	1994	89,400,173	1993	84,818,282
1992	81,338,533	1991	76,810,976	1990	72,282,099	1989	67,962,283
1988	64,028,467	1987	60,492,910	1986	56,374,628	1985	52,125,690
1984	48,250,950	1983	44,895,592	1982	41,341,785	1981	37,485,438
1980	32,401,097	1979	28,223,486	1978	24,892,272	1977	22,132,891
1976	19,509,979	1975	17,633,767	1974	16,385,231	1973	15,169,989
1972	13,967,502	1971	13,002,925	1970	12,044,643	1969	11,459,219
1968	10,926,395	1967	10,378,786	1966	9,862,898	1965	9,449,637
1964	9,025,050	1963	8,706,638	1962	8,480,384	1961	8,286,195
1960	7,961,020	1959	7,778,188	1958	7,523,275	1957	7,218,961
1956	6,946,825	1955	6,725,161	1954	6,562,759	1953	6,409,245
1952	6,223,423	1951	5,994,354	1950	5,575,205	1949	5,031,195
1948	4,407,997	1947	3,559,464	1946	2,605,077	1945	1,812,852
1944	1,671,842	1943	1,644,023	1942	1,637,502	1941	1,551,222
1940	1,462,402	1939	1,282,146	1938	1,123,311	1937	982,698
1936	853,161						

Curve: O2		ASL: 34		SSD: 2.73E+14		IV: 59	
Year	Balance	Year	Balance	Year	Balance	Year	Balance
2004	119,302,680	2003	117,339,632	2002	116,372,487	2001	114,652,172
2000	110,601,077	1999	106,747,970	1998	101,228,408	1997	101,121,798
1996	101,067,233	1995	93,401,564	1994	89,775,019	1993	85,166,401
1992	81,658,181	1991	77,101,112	1990	72,543,413	1989	68,195,908
1988	64,235,556	1987	60,674,375	1986	56,532,005	1985	52,261,621
1984	48,368,219	1983	44,996,460	1982	41,428,484	1981	37,560,938
1980	32,470,082	1979	28,291,203	1978	24,962,483	1977	22,208,142
1976	19,592,271	1975	17,724,375	1974	16,484,220	1973	15,276,881
1972	14,081,872	1971	13,124,211	1970	12,172,156	1969	11,592,014
1968	11,063,222	1967	10,518,465	1966	10,004,345	1965	9,591,764
1964	9,166,794	1963	8,846,959	1962	8,618,166	1961	8,420,313
1960	8,090,562	1959	7,902,339	1958	7,641,258	1957	7,330,216
1956	7,050,920	1955	6,821,677	1954	6,651,263	1953	6,489,318
1952	6,294,746	1951	6,056,760	1950	5,628,820	1949	5,076,512
1948	4,445,767	1947	3,590,799	1946	2,631,464	1945	1,835,780
1944	1,692,053	1943	1,661,547	1942	1,652,257	1941	1,563,199
1940	1,471,689	1939	1,288,930	1938	1,127,867	1937	985,275
1936	853,987						

Curve: O1		ASL: 31		SSD: 2.88E+14		IV: 60	
Year	Balance	Year	Balance	Year	Balance	Year	Balance
2004	119,634,016	2003	117,668,430	2002	116,696,412	2001	114,969,801
2000	110,912,274	1999	107,052,776	1998	101,526,974	1997	101,419,351
1996	101,366,936	1995	93,701,257	1994	90,073,317	1993	85,461,494
1992	81,948,389	1991	77,384,930	1990	72,819,710	1989	68,463,703
1988	64,493,944	1987	60,922,515	1986	56,769,301	1985	52,487,812
1984	48,583,184	1983	45,200,099	1982	41,620,820	1981	37,742,259
1980	32,641,109	1979	28,452,836	1978	25,115,397	1977	22,352,854
1976	19,729,266	1975	17,854,062	1974	16,606,835	1973	15,392,614
1972	14,190,977	1971	13,226,950	1970	12,268,792	1969	11,682,783
1968	11,148,309	1967	10,598,078	1966	10,078,710	1965	9,661,095
1964	9,231,299	1963	8,906,836	1962	8,673,580	1961	8,471,412
1960	8,137,514	1959	7,945,310	1958	7,680,403	1957	7,365,711
1956	7,082,939	1955	6,850,380	1954	6,676,785	1953	6,511,783
1952	6,314,283	1951	6,073,512	1950	5,642,975	1949	5,088,317
1948	4,455,503	1947	3,598,798	1946	2,638,109	1945	1,841,429
1944	1,696,902	1943	1,665,642	1942	1,655,621	1941	1,565,867
1940	1,473,711	1939	1,290,373	1938	1,128,814	1937	985,796
1936	854,149						

Curve: R0.5		ASL: 28		SSD: 2.93E+14		IV: 61	
Year	Balance	Year	Balance	Year	Balance	Year	Balance
2004	118,469,680	2003	116,668,108	2002	115,840,519	2001	114,238,502
2000	110,286,756	1999	106,515,363	1998	101,063,110	1997	101,005,849
1996	100,976,026	1995	93,323,299	1994	89,705,576	1993	85,098,393

1992	81,585,394	1991	77,021,863	1990	72,458,619	1989	68,103,626
1988	64,134,083	1987	60,561,879	1986	56,407,923	1985	52,127,377
1984	48,225,726	1983	44,847,032	1982	41,273,559	1981	37,403,336
1980	32,315,552	1979	28,146,778	1978	24,833,195	1977	22,097,411
1976	19,502,858	1975	17,658,079	1974	16,441,047	1973	15,256,004
1972	14,082,570	1971	13,145,554	1970	12,213,000	1969	11,650,811
1968	11,137,905	1967	10,607,041	1966	10,104,937	1965	9,702,446
1964	9,285,652	1963	8,972,100	1962	8,747,551	1961	8,551,874
1960	8,222,526	1959	8,033,094	1958	7,769,235	1957	7,454,190
1956	7,169,839	1955	6,934,503	1954	6,756,903	1953	6,586,663
1952	6,382,809	1951	6,134,743	1950	5,696,379	1949	5,133,899
1948	4,493,689	1947	3,630,576	1946	2,665,094	1945	1,865,370
1944	1,718,635	1943	1,685,055	1942	1,672,437	1941	1,579,888
1940	1,484,867	1939	1,298,736	1938	1,134,582	1937	989,146
1936	855,252						

Curve: R1 ASL: 26 SSD: 3.14E+14 IV: 63

Year	Balance	Year	Balance	Year	Balance	Year	Balance
2004	118,133,324	2003	116,533,448	2002	115,865,580	2001	114,381,185
2000	110,515,105	1999	106,806,631	1998	101,400,288	1997	101,367,768
1996	101,332,772	1995	93,659,526	1994	90,014,888	1993	85,371,305
1992	81,814,661	1991	77,198,752	1990	72,578,601	1989	68,167,396
1988	64,142,844	1987	60,516,996	1986	56,312,835	1985	51,987,717
1984	48,047,494	1983	44,635,458	1982	41,034,069	1981	37,142,877
1980	32,044,512	1979	27,876,874	1978	24,573,529	1977	21,854,831
1976	19,283,127	1975	17,465,518	1974	16,277,494	1973	15,122,004
1972	13,978,494	1971	13,071,276	1970	12,167,898	1969	11,633,553
1968	11,146,341	1967	10,638,933	1966	10,158,036	1965	9,774,321
1964	9,373,787	1963	9,073,926	1962	8,860,262	1961	8,672,569
1960	8,348,639	1959	8,162,234	1958	7,899,079	1957	7,582,839
1956	7,295,641	1955	7,055,847	1954	6,872,131	1953	6,694,134
1952	6,481,024	1951	6,222,455	1950	5,772,884	1949	5,199,240
1948	4,548,478	1947	3,676,201	1946	2,703,822	1945	1,899,635
1944	1,749,617	1943	1,712,617	1942	1,696,223	1941	1,599,657
1940	1,500,549	1939	1,310,461	1938	1,142,648	1937	993,823
1936	856,790						

Curve: S-0.5 ASL: 28 SSD: 3.28E+14 IV: 64

Year	Balance	Year	Balance	Year	Balance	Year	Balance
2004	118,217,838	2003	116,487,107	2002	115,728,358	2001	114,189,554
2000	110,298,721	1999	106,588,944	1998	101,201,158	1997	101,203,844
1996	101,213,391	1995	93,590,255	1994	90,002,143	1993	85,417,501
1992	81,919,812	1991	77,363,595	1990	72,802,659	1989	68,444,903
1988	64,466,846	1987	60,879,084	1986	56,703,020	1985	52,396,222
1984	48,464,979	1983	45,052,655	1982	41,441,580	1981	37,531,788
1980	32,407,170	1979	28,207,943	1978	24,869,185	1977	22,112,511
1976	19,501,522	1975	17,644,615	1974	16,418,005	1973	15,225,137
1972	14,046,100	1971	13,105,793	1970	12,172,206	1969	11,610,923

1968	11,100,116	1967	10,572,549	1966	10,075,007	1965	9,678,153
1964	9,267,884	1963	8,961,570	1962	8,744,485	1961	8,556,060
1960	8,233,752	1959	8,051,024	1958	7,793,173	1957	7,483,540
1956	7,203,963	1955	6,972,511	1954	6,797,555	1953	6,628,405
1952	6,423,927	1951	6,173,473	1950	5,731,237	1949	5,164,013
1948	4,518,685	1947	3,650,894	1946	2,682,337	1945	1,881,736
1944	1,735,269	1943	1,701,594	1942	1,688,177	1941	1,594,162
1940	1,497,152	1939	1,308,669	1938	1,142,018	1937	993,872
1936	856,990						

Curve: L0 ASL: 31 SSD: 3.48E+14 IV: 66

Year	Balance	Year	Balance	Year	Balance	Year	Balance
2004	118,881,105	2003	117,121,076	2002	116,335,695	2001	114,765,769
2000	110,844,449	1999	107,113,455	1998	101,718,745	1997	101,726,129
1996	101,729,310	1995	94,094,196	1994	90,503,459	1993	85,916,234
1992	82,415,897	1991	77,850,614	1990	73,276,393	1989	68,905,139
1988	64,912,489	1987	61,306,870	1986	57,108,663	1985	52,777,349
1984	48,819,719	1983	45,377,477	1982	41,731,270	1981	37,781,523
1980	32,615,961	1979	28,379,980	1978	25,008,144	1977	22,221,318
1976	19,583,591	1975	17,704,085	1974	16,457,448	1973	15,246,022
1972	14,050,418	1971	13,095,846	1970	12,150,363	1969	11,579,585
1968	11,060,854	1967	10,526,963	1966	10,024,923	1965	9,625,380
1964	9,214,173	1963	8,908,734	1962	8,693,952	1961	8,508,794
1960	8,190,653	1959	8,012,974	1958	7,760,513	1957	7,456,697
1956	7,183,379	1955	6,958,384	1954	6,789,674	1953	6,626,045
1952	6,425,921	1951	6,178,239	1950	5,737,036	1949	5,169,406
1948	4,522,432	1947	3,652,342	1946	2,682,249	1945	1,882,131
1944	1,737,777	1943	1,706,165	1942	1,694,283	1941	1,601,116
1940	1,504,313	1939	1,315,433	1938	1,147,941	1937	998,339
1936	859,007						

Curve: R1.5 ASL: 25 SSD: 3.60E+14 IV: 67

Year	Balance	Year	Balance	Year	Balance	Year	Balance
2004	118,369,485	2003	116,962,363	2002	116,454,065	2001	115,095,381
2000	111,325,630	1999	107,687,626	1998	102,328,519	1997	102,315,426
1996	102,265,951	1995	94,557,946	1994	90,866,117	1993	86,160,946
1992	82,530,865	1991	77,832,713	1990	73,126,140	1989	68,626,899
1988	64,514,393	1987	60,801,523	1986	56,512,858	1985	52,108,969
1984	48,097,642	1983	44,622,250	1982	40,965,785	1981	37,029,497
1980	31,899,065	1979	27,713,309	1978	24,403,310	1977	21,687,145
1976	19,125,733	1975	17,324,423	1974	16,156,236	1973	15,022,754
1972	13,902,991	1971	13,020,573	1970	12,142,408	1969	11,632,881
1968	11,169,242	1967	10,683,898	1966	10,223,355	1965	9,857,940
1964	9,473,408	1963	9,187,040	1962	8,984,064	1961	8,804,114
1960	8,485,213	1959	8,301,230	1958	8,037,954	1957	7,719,417
1956	7,427,994	1955	7,182,175	1954	6,990,749	1953	6,803,530
1952	6,579,998	1951	6,310,182	1950	5,849,110	1949	5,264,370
1948	4,603,386	1947	3,722,339	1946	2,743,218	1945	1,934,309