KENTUCKY POWER COMPANY

DEPRECIATION STUDY

OF

ELECTRIC PLANT IN SERVICE

AT DECEMBER 31, 1989

CONTENTS

Introduction

This report presents the results of a depreciation study of
Kentucky Power Company's (KP) depreciable electric utility plant in
service at December 31, 1989. The study was prepared by James E.
Henderson, Administrator of Depreciation Studies and Plant
Accounting at American Electric Power Service Corporation.
The purpose of this depreciation study was to develop appropriate
annual depreciation accrual rates for each of the primary plant
accounts which comprise the functional groups for which KP computes
its annual depreciation expense.

The recommended depreciation rates are based on the Straight Line
Remaining Life Method of computing depreciation. Further
explanation of this method is contained in Section II of this
report.

Section I of this report contains Schedule I, which shows the
recommended depreciation accrual rates by primary plant accounts
and composited by the functional groups for which KP computes
depreciation accruals and maintains the accumulated book
depreciation. A comparison of KP's current functional group
composite depreciation rates and accruals to the recommended
functional group rates and accruals shown on Schedule I follows:

ANNUAL DEPRECIATION ACCRUALS ($000)

	Current		Recommended	
Functional Group	Rate %	Amount	Rate %	Amount
Steam Production	3.67	$ 7,220	3.78	$ 7,430
Transmission	2.07	4,640	1.71	3,830
Distribution	3.64	8,244	3.52	7,979
General	2.66	551	2.54	527
Total	3.09	$20,655	2.96	$19,766

Calculations were also made to compare the calculated depreciation
requirement to the actual accumulated depreciation on KP's books at
December 31, 1989. These calculations indic __d the total
accumulated depreciation should be $207,945,152 whereas KP's books
showed $199,619,331. This reflects a variance of $8,325,821 or
about 4%. This difference is small, less than 6 months accrual,
and indicates that the accumulated depreciation is at an
appropriate level as of the study date.

Section II contains an explanation of the methods and procedures
used in this study. Examples of computations discussed in Section
II appear in Appendix A.

Section I

Schedule I

SCHEDULE I

Schedule I shows the determination of the recommended annual
depreciation accrual rate by primary plant accounts by the
straight line remaining life method. An explanation of the
schedule follows:

Column I   -   Account number.

Column II   -   Account title.

Column III   -   Original Cost at December 31, 1989.

Column IV   -   Average Life and (Iowa) Curve Type.
                    Fcst. indicates lives were determined using
                    a Life-Span Forecast Analysis.

Column V   -   Terminal Retirement Date for accounts utilizing
                    Life-Span Forecast Analysis.

Column VI   -   Net Salvage Ratio.

Column VII   -   Total to be Recovered (Column III)(Column VI).

Column VIII   -   Calculated Depreciation Requirement.

Column IX   -   Allocated Accumulated Depreciation - KP's
                    functional group accumulated depreciation
                    (book reserve) spread to each account on the basis
                    of the Calculated Depreciation Requirement shown in
                    Column VIII.

Column X   -   Remaining to be Recovered (Column VII - Column
                    IX).

Column XI   -   Average Remaining Life.

Column XII   -   Recommended Annual Accrual Amount (Column
                    X/Column XI).

Column XIII   -   Recommend Annual Accrual Percent or Depreciation
                    Rate (Column XII/Column III).

I - 1

KENTUCKY POWER COMPANY   SCHEDULE I
CALCULATION OF DEPRECIATION RATES BY THE REMAINING LIFE METHOD
BASED ON PLANT IN SERVICE AT DECEMBER 31, 1989
AVERAGE LIFE GROUP (ALG) METHOD ACCRUAL RATES

ACCOUNT		ORIGINAL COST AT 12/31/89 (III)	AVERAGE LIFE & CURVE TYPE (IV)	TERMINAL RETIREMENT DATE (V)	NET SALVAGE RATIO (VI)	TOTAL TO BE RECOVERED (VII)	CALCULATED DEPRECIATION REQUIREMENT (VIII)	ALLOCATED ACCUMULATED DEPRECIATION (IX)	REMAINING TO BE RECOVERED (X)	AVERAGE REMAINING LIFE (XI)	RECOMMENDED ANNUAL ACCRUAL	
NO. (I)	TITLE (II)										AMOUNT (XII)	PERCENT (XIII)
STEAM PRODUCTION PLANT												
311.0	Structures & Improvements - Unit 1	6,480,055	FCST.	2013	1.22	7,905,667	4,121,315	3,565,895	4,339,772	23.4	185,778	2.87%
311.0	Structures & Improvements - Unit 2	18,472,125	FCST.	2009	1.22	22,535,993	11,185,533	9,678,085	12,857,907	19.3	667,250	3.61%
311.0	Structures & Improvements	24,952,180				30,441,660	15,306,848	13,243,981	17,197,679		853,028	3.42%
312.0	Boiler Plant Equipment - Unit 1	18,821,907	FCST.	2013	1.22	22,962,727	11,746,357	10,163,328	12,799,398	22.0	581,526	3.09%
312.0	Boiler Plant Equipment - Unit 2	86,737,669	FCST.	2009	1.22	105,819,956	49,548,861	42,871,279	62,948,677	17.8	3,530,492	4.07%
312.0	Boiler Plant Equipment	105,559,576				128,782,683	61,295,218	53,034,608	75,748,075		4,112,019	3.90%
314.0	Turbogenerator Equip. - Unit 1	16,294,658	FCST.	2013	1.22	19,879,483	9,037,906	7,819,889	12,059,594	22.2	543,715	3.34%
314.0	Turbogenerator Equip. - Unit 2	34,042,698	FCST.	2009	1.22	41,532,092	20,246,148	17,517,623	24,014,469	17.8	1,348,370	3.96%
314.0	Turbogenerator Equipment	50,337,356				61,411,574	29,284,054	25,337,512	36,074,062		1,892,085	3.76%
315.0	Accessory Electrical Equip. - Unit 1	2,481,884	FCST.	2013	1.22	3,027,898	1,522,708	1,317,496	1,710,402	23.2	73,724	2.97%
315.0	Accessory Electrical Equip. - Unit 2	9,401,515	FCST.	2009	1.22	11,469,848	5,481,222	4,742,531	6,727,318	19.1	351,847	3.74%
315.0	Accessory Electrical Equipment	11,883,399				14,497,747	7,003,930	6,060,027	8,437,720		425,571	3.58%
316.0	Misc. Power Plant Equip. - Unit 1	1,042,317	FCST.	2013	1.22	1,271,627	671,234	580,773	690,853	22.1	31,232	3.00%
316.0	Misc. Power Plant Equip. - Unit 2	2,959,278	FCST.	2009	1.22	3,610,319	1,645,037	1,423,339	2,186,980	18.8	116,082	3.92%
316.0	Miscellaneous Power Plant Equipment	4,001,595				4,881,946	2,316,271	2,004,113	2,877,833		147,314	3.68%
	Total Steam Production Plant	196,734,106				240,015,609	115,206,321	99,680,240	140,335,369		7,430,017	3.78%

I-2

KENTUCKY POWER COMPANY
CALCULATION OF DEPRECIATION RATES BY THE REMAINING LIFE METHOD
BASED ON PLANT IN SERVICE AT DECEMBER 31, 1989
AVERAGE LIFE GROUP (ALG) METHOD ACCRUAL RATES

SCHEDULE I

NO. (I)	TITLE (II)	ORIGINAL COST AT 12/31/89 (III)	AVERAGE LIFE AND CURVE TYPE (IV)	TERMINAL RETIREMENT DATE (V)	NET SALVAGE RATIO (VI)	TOTAL TO BE RECOVERED (VII)	CALCULATED DEPRECIATION REQUIREMENT (VIII)	ALLOCATED ACCUMULATED DEPRECIATION (IX)	REMAINING TO BE RECOVERED (X)	AVERAGE REMAINING LIFE (XI)	RECOMMENDED ANNUAL ACCRUAL AMOUNT (XII)	PERCENT (XIII)
TRANSMISSION PLANT												
350.2	Rights of Way	18,343,932	75 R4.0	N.A.	1.00	18,343,932	2,423,961	2,955,668	15,388,264	65.1	236,415	1.29%
352.0	Structures & Improvements	4,097,243	55 S1.5	N.A.	1.00	4,097,243	929,029	1,132,816	2,964,427	42.5	69,702	1.70%
353.0	Station Equipment	43,439,346	50 R0.5	N.A.	0.75	32,579,510	-5,922,313	7,221,400	25,358,110	40.9	619,851	1.43%
354.0	Towers & Fixtures Below 138KV	734,914	32 R4.0	N.A.	1.00	734,914	403,920	492,522	242,392	14.4	16,821	2.29%
354.0	Towers & Fixtures Above 138KV	75,569,462	55 R4.0	N.A.	1.00	75,569,462	11,582,836	14,123,584	61,445,878	46.6	1,319,430	1.75%
355.0	Poles & Fixtures Below 138KV	8,302,731	25 S6.0	N.A.	1.00	8,302,731	4,134,742	5,041,717	3,261,014	12.6	259,842	3.13%
355.0	Poles & Fixtures Above 138KV	4,130,948	45 R3.0	N.A.	1.00	4,130,948	969,355	1,181,987	2,948,961	34.4	85,626	2.07%
356.0	OH Cond. & Devices Below 138KV	8,028,919	35 S6.0	N.A.	0.90	7,226,027	3,445,607	4,201,417	3,024,610	18.3	165,189	2.06%
356.0	OH Cond. & Devices Above 138KV	61,406,717	50 R3.0	N.A.	0.90	55,266,045	9,628,842	11,740,973	43,525,072	41.3	1,054,131	1.72%
357.0	Underground Conduit	11,590	37 R2.0	N.A.	1.00	11,590	2,066	2,519	9,071	30.4	298	2.57%
358.0	Underground Conductor	106,066	44 R1.0	N.A.	1.00	106,066	13,099	15,972	90,094	38.6	2,336	2.20%
	Total Transmission Plant	224,171,868				206,368,468	39,455,770	48,110,575	158,257,893		3,829,642	1.71%
DISTRIBUTION PLANT												
360.2	Rights of Way	2,257,140	75 R4.0	N.A.	1.00	2,257,140	945,495	900,186	1,356,954	43.6	31,137	1.38%
361.0	Structures & Improvements	1,778,665	65 L0.5	N.A.	1.00	1,778,665	253,210	241,076	1,537,589	55.8	27,580	1.55%
362.0	Station Equipment	20,821,283	25 L0.0	N.A.	0.75	15,615,962	4,111,054	3,914,047	11,701,915	18.4	635,283	3.05%
364.0	Poles, Towers, & Fixtures	63,822,842	28 L0.0	N.A.	1.00	63,822,842	10,653,509	10,142,979	53,679,863	23.3	2,300,894	3.61%
365.0	Overhead Conductor & Devices	50,285,231	26 R1.5	N.A.	0.75	37,713,923	10,234,024	9,743,597	27,970,327	18.9	1,476,786	2.94%
366.0	U. G. Conduit	757,353	37 R2.0	N.A.	1.00	757,353	178,061	169,528	587,825	28.3	20,771	2.74%
367.0	U. G. Conductor	1,766,966	44 R1.0	N.A.	1.00	1,766,966	272,532	259,758	1,507,208	37.2	40,505	2.29%
368.0	Line Transformers	49,415,153	25 R1.5	N.A.	0.85	42,002,880	11,786,758	11,221,922	30,780,958	18.0	1,711,955	3.46%
369.0	Services	13,190,725	18 R2.0	N.A.	1.00	13,190,725	4,849,229	4,616,848	8,573,877	11.4	753,416	5.71%
370.0	Meters	16,631,541	27 R0.5	N.A.	1.00	16,631,541	3,399,360	3,236,458	13,395,083	21.5	623,607	3.75%
371.0	Installations on Custs. Prem.	3,913,254	11 L0.0	N.A.	0.70	2,739,278	619,759	590,059	2,149,218	8.5	252,552	6.45%
373.0	Street Lighting & Signal Sys.	1,823,752	15 L0.0	N.A.	0.85	1,550,189	305,015	290,398	1,259,791	12.1	104,547	5.73%
	Total Distribution Plant	226,463,905				199,827,465	47,608,306	45,326,856	154,500,609		7,979,035	3.52%

I-3

KENTUCKY POWER COMPANY SCHEDULE I
CALCULATION OF DEPRECIATION RATES BY THE REMAINING LIFE METHOD
BASED ON PLANT IN SERVICE AT DECEMBER 31, 1989
AVERAGE LIFE GROUP (ALG) METHOD ACCRUAL RATES

ACCOUNT NO. (I)	TITLE (II)	ORIGINAL COST AT 12/31/89 (III)	AVERAGE LIFE AND CURVE TYPE (IV)	TERMINAL RETIREMENT DATE (V)	NET SALVAGE RATIO (VI)	TOTAL TO BE RECOVERED (VII)	CALCULATED DEPRECIATION REQUIREMENT (VIII)	ALLOCATED ACCUMULATED DEPRECIATION (IX)	REMAINING TO BE RECOVERED (X)	AVERAGE REMAINING LIFE (XI)	RECOMMENDED ANNUAL ACCRUAL AMOUNT (XII)	PERCENT (XIII)
	GENERAL PLANT											
389.2	Rights of Way	31,964	75 E4.0	N.A.	1.00	31,964	3,018	3,458	28,506	67.9	420	1.31%
390.0	Structures & Improvements	14,953,539	45 L3.0	N.A.	1.00	14,953,539	3,844,462	4,404,663	10,548,876	33.4	315,551	2.11%
391.0	Office Furniture & Equipment	1,003,832	35 B0.5	N.A.	0.90	903,449	219,585	251,583	651,866	26.5	24,608	2.45%
392.0	Office Trans. Equip. Other	67,171	30 R3.0	N.A.	1.00	67,171	29,745	34,079	33,092	16.7	1,979	2.95%
393.0	Stores Equipment	167,954	30 R1.0	N.A.	1.00	167,954	44,519	51,006	116,948	22.1	5,304	3.16%
394.0	Tools Shop & Garage Equipment	541,771	30 90.5	N.A.	1.00	541,771	110,850	127,003	414,768	23.9	17,383	3.21%
395.0	Laboratory Equipment	446,407	30 L5.0	N.A.	1.00	446,407	144,397	165,438	280,969	20.3	13,841	3.10%
397.0	Communication Equipment	3,009,874	22 L3.0	N.A.	1.00	3,009,874	1,078,317	1,235,445	1,774,429	14.1	125,668	4.16%
398.0	Miscellaneous Equipment	498,397	20 S5.0	N.A.	1.00	498,397	199,861	228,984	269,413	12.0	22,489	4.51%
	Total General Plant	20,720,909				20,620,526	5,674,755	6,501,660	14,118,866		527,242	2.54%
	Total Depreciable Plant	660,090,788				666,832,068	207,945,152	199,619,331	467,212,737		19,765,937	2.96%

SECTION II

DISCUSSION OF METHODS

AND PROCEDURES USED IN THE STUDY

STUDY METHODS AND PROCEDURES

Group Method

All of the depreciable property included in this report was
considered on a group plan. Under the group plan, depreciation
expense is accrued upon the basis of the original cost of all
property included in each depreciable plant account. Upon
retirement of any depreciable property, its full cost, less any net
salvage realized, is charged to accrued depreciation reserve
regardless of the age of the particular item retired. Also, under
this plan, the dollars in each primary plant account are considered
as a separate group for depreciation accounting purposes and an
annual depreciation rate for each account is determined. The
annual accruals were then summed, to arrive at the total accrual
for each functional group. The total accrual divided by the
original cost yields the functional group accrual rate.

Capital Recovery Methods

There are two generally accepted methods that are usually used to
develop straight line depreciation accrual rates. The average
service life method recovers the original cost of the plant,
adjusted for net salvage, over the average service of the
investment. The basic assumptions used in determining depreciation
rates by the Average Service Life method are: 1) the property will
be retired over a specified average life and 2) the future amount

II - 1

of net salvage is known. One major shortcoming of the Average

Service Life method is that it does not provide a mechanism to

adjust the accumulated depreciation when changes occur in the

average service life or net salvage.

The Remaining Life method compensates for this shortcoming by

recovering the original cost of the plant, adjusted for net

salvage, less the accumulated depreciation, over the average

remaining life of the plant. By this method, the annual

depreciation rate for each account is determined on the following

basis:

Annual
Depreciation Expense =

$$\frac{(\text{Orig. Cost}) (\text{Net Salvage Ratio}) - \text{Accumulated Depreciation}}{\text{Average Remaining Life}}$$

Annual
Depreciation = $\dfrac{\text{Annual Depreciation Expense}}{\text{Original Cost}}$
Rate

Because the Remaining Life method provides a method to adjust the

accumulated depreciation when changes occur in the estimates of

service life and net salvage for depreciable property groups, it is

recommended that the depreciation rates be determined by the

Straight Line Remaining Life Method.

Methods of Life Analysis

Depending upon the type of property and the nature of the data

available from the property accounting records, one of three

analysis methods was used to arrive at the historically realized

mortality characteristics and service lives of the depreciable

plant investments. These methods are identified and described as

follows:

Forecast Analysis

The life-span forecast analysis was employed for production plant.

KP's investment in production plant is the Big Sandy Generating

Station which is located on the Big Sandy River near Louisa,

Kentucky and consists of Unit One with a nameplate capacity of

260,000 KW and Unit Two with a nameplate capacity of 800,000 KW.

Units One and Two were placed in service in 1963 and 1969,

respectively. The life-span method of analysis is particularly

suited to specific locations property, such as Big Sandy Plant,

where all of the surviving investments are likely to be retired in

total at a future date.

The key elements in the life-span forecast analysis are the aged

surviving investments, the projected deactivation date of the

facility and the expected interim retirements. Interim retirements

are those that are expected to occur between the date of the

depreciation study and the expected final deactivation date.

Examples of interim retirements include fans, pumps, motors, a set

of boiler tubes, a turbine rotor, etc.

The aged surviving investments were obtained from KP's property

records. The deactivation dates used in the life-span forecast

II - 3

analysis were 2013 for Unit One and 2009 for Unit Two. The
deactivation dates were provided by American Electric Power
Service Corporation, System Planning Department. The interim
retirement history for each unit was analyzed by primary plant
account. The results of those analyses were used to project future
interim retirements. An example of the interim retirement analysis
for Account 312.0, Boiler Plant Equipment, for Unit One is shown in
the Appendix on Page A-1.

Actuarial Analysis

This method of analyzing past experience represents the application
to industrial property of statistical procedures developed in the
life insurance field for investigating human mortality. It is
distinguished from other methods of life estimation by the
requirement that it is necessary to know the age of the property at
the time of its retirement and the age of survivors, or plant
remaining in service; that is, the installation date must be known
for each particular retirement and for each particular survivor.

The application of this method involves the statistical procedure
known as the "annual rate method" of analysis. This procedure
relates the retirements during each age interval to the exposures
at the beginning of that interval, the ratio of these being the
annual retirement ratio. Subtracting each retirement ratio from
unity yields a sequence of annual survival ratios from which a
survivor curve can be determined. This is accomplished by the

II - 4

consecutive multiplication of the survivor ratios. The length of this curve depends primarily upon the age of the oldest property. Normally, if the period of years from the inception of the account to the time of study is short in relation to the expected maximum life of the property, an incomplete or stub survivor curve results.

While there are a number of acceptable methods of smoothing and extending this stub survivor curve in order to compute the area under it from which the average life is determined, the well-known Iowa Type Curve Method was used in this study.

By this procedure instead of mathematically smoothing and projecting the stub survivor curve to determine the average life of the group, it was assumed that the stub curve would have the same mortality characteristics as the type curve selected. The selection of the appropriate type curve and average life is accomplished by plotting the stub curve, superimposing on it Iowa curves of the various types and average lives drawn to the same scale, and then determining which Iowa type curve and average life best matches the stub.

An example of the calculations involved in the Actuarial Method of Life Analysis is shown in the Appendix on Pages A-2 through A-4 for Account 353.0 - Transmission Station Equipment. Pages A-2 and A-3 show the computation of the actual survivor curve for the experience band 1950-1989 inclusive based on historical data

II - 5

supplied by KP. The actual survivor curve for the 1950-1989

period is plotted and matched on Page A-4, as explained above.

This method was used for the following accounts:

350.2 Transmission-Rights of Way

352.0 Structures and Improvements

353.0 Station Equipment

354.0 Towers and Fixtures 138KV and Above

355.0 Poles and Fixtures 138KV and Above

356.0 OH Conductor and Devices 138KV and Above

360.2 Distribution - Rights of Way

361.0 Structures and Improvements

362.0 Station Equipment

390.0 General - Structures and Improvements

Simulated Plant Record Analysis

The "Simulated Plant Record" (SPR) method designates a class of

statistical techniques that provide an estimate of the age

distribution, mortality dispersion and average service life of

property accounts whose recorded history provides no indication of

the age of the property units when retired from service. For each

such account, the available property records usually reveal only

the annual gross additions, annual retirements and balances with no

indication of the age of either plant retirements or annual plant

balances. For this study, the "Balances Method" of analysis was

used.

II - 6

The SPR Balances Method is a trial and error procedure that
attempts to duplicate the annual balance of a plant account by
distributing the actual annual gross additions over time according
to an assumed mortality distribution. Specifically, the dollars
remaining in service at any date are estimated by multiplying each
year's additions by the successive proportion surviving at each age
as given by the assumed survivor characteristics. For a given
year, the balance indicated is the accumulation of survivors from
all vintages and this is compared with the actual book balance.
This process is repeated for different survivor curves and average
life combinations until a pattern is discovered which produces a
series of "simulated balances" most nearly equalling the actual
balances shown in a company's books.

This determination is based on the distribution producing the
minimum sum of squared differences between the simulated balance
and the actual balances over a test period of years.

The iterative nature of the simulated methods makes them ideally
suited for computerized analysis. For each analysis of a given
property account, the computer program provides a single page
summary containing the results of each analysis indicating the
"best fit" based on criteria selected by the user.

The results of such and analysis by the Balance Method is shown for
Account 368 - Line Transformers on page A-5 in the Appendix. In

II - 7

the case of the Balances Method each curve type tested is shown
along with the average service life which produced the minimum sum
of squared differences from the actual balances. The analysis also
shows the value of the Index of Variation of the deference which is
calculated according to the following equation for the Balances
Method:

$$\text{Index of Variation} = (1000) \sqrt{\frac{\text{Sum of Squared Differences}}{\text{No. of Test Years}}} \Big/ \begin{array}{l}\text{Average} \\ \text{Actual} \\ \text{Balance}\end{array}$$

The lower the value of the Index the better the agreement with the
actual data. The best fit is marked with a dash on the output.
The SPR Method of Life Analysis was utilized for the following
accounts:

    354.0 Transmission - Towers and Fixtures Below 138 KV

    355.0 Poles and Fixtures Below 138 KV

    356.0 OH Conductor and Devices - Below 138 KV

    364.0 Distribution - Poles, Towers and Fixtures

    365.0 OH Conductor and Devices

    366.0 Underground Conduit

    367.0 Underground Conductor and Devices

    368.0 Line Transformers

    369.0 Services

    370.0 Meters

    371.0 Installations on Customers Premises

373.0 Street Lighting and Signal Systems

391.0 Office Furniture and Equipment

392.0 Transportation Equipment - Other

393.0 Stores Equipment

394.0 Tools, Shop and Garage Equipment

395.0 Laboratory Equipment

397.0 Communication Equipment

398.0 Miscellaneous Equipment

Physical Inspection of Property

On November 27, 1990, we visited the Big Sandy Generating Station
and viewed other facilities including Baker substation to observe
housekeeping, maintenance and construction practices in order to be
familiar with the equipment and the environment in which it
functions.

Final Selection of Average Life and Curve Type

The final selection of average life and curve type for each
depreciable plant account analyzed by the Actuarial and Simulating
Methods was primarily based on the results of the mortality
analyses of past retirement history.

Net Salvage

The net salvage percentages used in this report are expressed as
percent of original cost and are based primarily on the Company's
experience. KP maintains salvage and removal costs at the

functional plant level, rather than by primary plant accounts. To
aid in the selection, a review was made of the Company's
experience for each plant function with respect to salvage and
removal costs for the period 1954 to 1989. A sample of the type of
salvage analysis made appears in Appendix A on Pages A-6 through A
-8 for the Distribution Plant function. The salvage program
analyzes historical experience on an annual basis, on the
cumulative history basis and for 5-year moving averages to get the
historical net salvage, as well as indicated trends. In order to
determine a net salvage percent for the individual plant accounts,
the original cost retirements were detailed by account for the
period 1975-1989 and, based on judgement, a net salvage
percentage was selected for each account.

The net salvage percents selected were converted to net salvage
ratios and appear in Column VI on Schedule I and were used to
determine the total amount to be recovered through depreciation.
The same net salvage was also reflected in the determination of the
calculated depreciation requirement, which was used to allocate the
accumulated depreciation at the functional group to the accounts
comprising each group.

The net salvage ratios shown in Column VI on Schedule I in Section
I of this report may be explained as follows:

1.   Where the ratio is shown as unity (1.00), it was assumed that

the net salvage in that particular account would be zero.

2.   Where the ratio is less than unity, it was assumed that the
     salvage exceeded the removal costs. For example, if the net
     salvage were 20 percent, the net salvage ratio would be
     expressed as .80.

3.   Where the ratio is greater than unity, it was assumed that the
     salvage was less than the cost of removal. For example, if
     the net salvage were minus 5 percent, the net salvage ratio
     would be expressed as 1.05.

<u>Net Salvage for Steam Production Plants</u>

While the analyses described above would be applicable to the
interim retirements for production plants, the most significant net
salvage realization for generating plants (units) occurs at the end
of their life. Therefore, to assist in establishing the net
salvage applicable to KP's steam generating plant, KP had a
detailed cost of removal study made by the engineering firm Sargent
and Lundy (S&L). S&L estimated the probable net cost to demolish
each plant based on the current price level. The S&L cost estimate
indicates that the demolition costs are labor intensive. We
recommend that KP adjust the estimated cost of removal in future
depreciation studies to reflect changes in price level. This will
enable KP to recover the estimated actual removal costs that can

reasonably be expected to be incurred at the time Big Sandy plant
is retired.

Calculation of Depreciation Requirement at December 31, 1989

KP maintains the accumulated depreciation by functional plant group
as required by the FERC Uniform System of Accounts. Therefore, it
was necessary to allocate the functional accumulated depreciation
to the individual plant accounts to complete the accrual rate
calculation. The allocation was based on the calculation of a
depreciation requirement (theoretical reserve) for each plant
account using the average service life and curve type recommended
in this study. An example of the calculation of the depreciation
requirement at December 31, 1989 for Account 353 - Transmission
Station Equipment, is shown on Pages A-9 and A-10 in Appendix A.

That sample printout is explained in detail as follows:

Column I   -   Age of each year's installation at December 31,
                   1989 based on the conventional procedure that all
                   property installed in any year is assumed to be
                   installed at the midpoint of that year.

Column II   -   Year of installation of the surviving dollars shown
                   in Column III.

Column III   -   The original cost at December 31, 1989 by year
                   installed, as supplied directly from Company
                   records.

Column IV   -   The Average Remaining Life of each vintage of
Original Cost at the various ages indicated in
Column I.

Column V   -   Depreciation Reserve Ratio based on the Life and
Dispersion (Iowa Curve) shown in Column IV heading.

Column VI   -   Theoretical Reserve is the product of Column III
times Column V for each year.

The effect of any estimated net salvage, as indicated on page A-10,
is provided by adjusting the subtotal rather than have each vintage
of original cost appearing in Column III reflect such salvage.

The Average Remaining Life, also shown, is the result of the
weighting of the dollars of each age.

Appendix A

Examples of Calculations Discussed In Section II

Interim Retirement Analysis

Actuarial Analysis

Simulated Plant Record Analysis

Net Salvage Analysis

Calculation of Depreciation Requirement

A-1

KENTUCKY POWER COMPANY
CALCULATION OF INTERIM RETIREMENT RATIOS
BIG SANDY GENERATING STATION UNIT #1
ACCOUNT 312.0 BOILER PLANT EQUIPMENT

YEAR	ADDITIONS	RETIREMENTS	BALANCE	AVERAGE BALANCE	RETIREMENT RATIO
1963	16,508,970	0	16,508,970	N. A.	N. A.
1964	119,842	8,093	16,620,719	16,564,845	0.0005
1965	33,135	7,505	16,646,349	16,633,534	0.0005
1966	176,256	19,803	16,802,802	16,724,576	0.0012
1967	7,026	3,196	16,806,632	16,804,717	0.0002
1968	39,011	127,966	16,717,677	16,762,155	0.0076
1969	2,036	5,000	16,714,773	16,716,225	0.0003
1970	960,242	569,493	17,105,522	16,910,148	0.0337
1971	20,599	7,136	17,118,985	17,112,254	0.0004
1972	12,074	12,000	17,119,059	17,119,022	0.0007
1973	2,546	5,700	17,115,905	17,117,482	0.0003
1974	4,167	126,850	16,993,222	17,054,564	0.0074
1975	382	5,683	16,987,921	16,990,572	0.0003
1976	60,093	0	17,048,014	17,017,968	0.0000
1977	689,813	215,065	17,522,762	17,285,388	0.0124
1978	81,885	119,379	17,485,268	17,504,015	0.0068
1979	60,521	379	17,545,410	17,515,339	0.0000
1980	14,685	62,704	17,497,391	17,521,401	0.0036
1981	89,615	318,487	17,268,519	17,382,955	0.0183
1982	208,013	16,842	17,459,690	17,364,105	0.0010
1983	0	6,754	17,452,936	17,456,313	0.0004
1984	207,517	77,996	17,582,457	17,517,697	0.0045
1985	548,169	17,686	18,112,940	17,847,699	0.0010
1986	554,796	212,823	18,454,913	18,283,927	0.0116
1987	179,327	78,768	18,555,472	18,505,193	0.0043
1988	137,220	19,359	18,673,333	18,614,403	0.0010
1989	194,155	45,581	18,821,907	18,747,620	0.0024
TOTAL 1968-1989	4,066,926	2,051,651	385,354,076	384,346,439	0.1182

AVERAGE INTERIM RATE = 0.1182
                       ----   =   0.0054
                        22

FUTURE ANNUAL INTERIM RETIREMENTS = 18,821,907 * 0.0054   101,638

A-2

DELOITTE HASKINS & SELLS   DEPRECIATION SYSTEM - DSACT03 RELEASE

STUDY AS OF DECEMBER 31, 1989   PAGE

   **** KENTUCKY POWER COMPANY ****   10-23-
                    ACCOUNT NO.: 35300000

            1950 THRU 1989 BAND ANALYSIS SURVIVOR REPORT

                                       ANNUAL   CUMULATIVE
    AGE   RETIREMENTS   EXPOSURES % SURVIVORS % SURVIVORS
    ---   -----------   --------- ----------- -----------

    0.50   85384.   47795798.   99.82   99.82
    1.50   124128.   46770563.   99.73   99.56
    2.50   164148.   46177414.   99.64   99.20
    3.50   663567.   45128700.   98.53   97.74
    4.50   166590.   43378492.   99.62   97.37
    5.50   389781.   41783167.   99.07   96.46
    6.50   87653.   41420690.   99.79   96.26
    7.50   454579.   40323548.   98.87   95.17
    8.50   934988.   40171236.   97.67   92.96
    9.50   339612.   38688633.   99.12   92.14
   10.50   165754.   22809318.   99.27   91.47
   11.50   286107.   21758943.   98.69   90.27
   12.50   239179.   21599311.   98.89   89.27
   13.50   152052.   20330849.   99.25   88.60
   14.50   121464.   19912025.   99.39   88.06
   15.50   157036.   19801288.   99.21   87.36
   16.50   225197.   19647103.   98.85   86.36
   17.50   33783.   19407908.   99.83   86.21
   18.50   86261.   19001265.   99.55   85.82
   19.50   254107.   18512958.   98.63   84.64
   20.50   634015.   18063094.   96.49   81.67
   21.50   29937.   7694907.   99.61   81.35
   22.50   28296.   7155196.   99.60   81.03
   23.50   116468.   6889829.   98.31   79.66
   24.50   140673.   6550338.   97.85   77.95
   25.50   46497.   5937298.   99.22   77.34
   26.50   11929.   5553437.   99.79   77.17
   27.50   69537.   4583786.   98.48   76.00
   28.50   37592.   4139021.   99.09   75.31
   29.50   166512.   3912958.   95.74   72.11
   30.50   48748.   3711018.   98.69   71.16
   31.50   34134.   3553118.   99.04   70.48
   32.50   46759.   3416574.   98.63   69.51
   33.50   144209.   3363453.   95.71   66.53
   34.50   7829.   3162746.   99.75   66.37
   35.50   3112.   3046997.   99.90   66.30

A-3

DELOITTE HASKINS & SELLS   DEPRECIATION SYSTEM - DSACTO3 RELEASE

STUDY AS OF DECEMBER 31, 1989   PAGE

        **** KENTUCKY POWER COMPANY ****   10-23-
                    ACCOUNT NO.: 35300000

                1950 THRU 1989 BAND ANALYSIS SURVIVOR REPORT

                                      ANNUAL   CUMULATIVE
        AGE   RETIREMENTS   EXPOSURES % SURVIVORS % SURVIVORS
        ---   -----------   --------- ----------- -----------

       36.50   25729.   3033563.   99.15   65.74
       37.50   23997.   2913798.   99.18   65.20
       38.50   1987.   2378568.   99.92   65.14
       39.50   1130.   2131863.   99.95   65.11
       40.50   19212.   2120705.   99.09   64.52
       41.50   5625.   1999343.   99.72   64.34
       42.50   706.   1954434.   99.96   64.31
       43.50   84069.   1950108.   95.69   61.54
       44.50   86535.   1823282.   95.25   58.62
       45.50   240935.   1534841.   84.30   49.42
       46.50   287.   1215711.   99.98   49.41
       47.50   0.   1206809.   100.00   49.41
       48.50   0.   942806.   100.00   49.41
       49.50   0.   911701.   100.00   49.41
       50.50   0.   888445.   100.00   49.41
       51.50   54.   856052.   99.99   49.40
       52.50   0.   822605.   100.00   49.40
       53.50   0.   666113.   100.00   49.40
       54.50   0.   602832.   100.00   49.40
       55.50   0.   592105.   100.00   49.40
       56.50   6860.   589121.   98.84   48.83
       57.50   134.   582261.   99.98   48.82
       58.50   0.   575141.   100.00   48.82
       59.50   13553.   575141.   97.64   47.67
       60.50   0.   136693.   100.00   47.67

   TOTAL   7208430.

   REALIZED LIFE = 43.94 YEARS

A-4

KENTUCKY POWER COMPANY

ACCOUNT 353.0 STATION EQUIPMENT
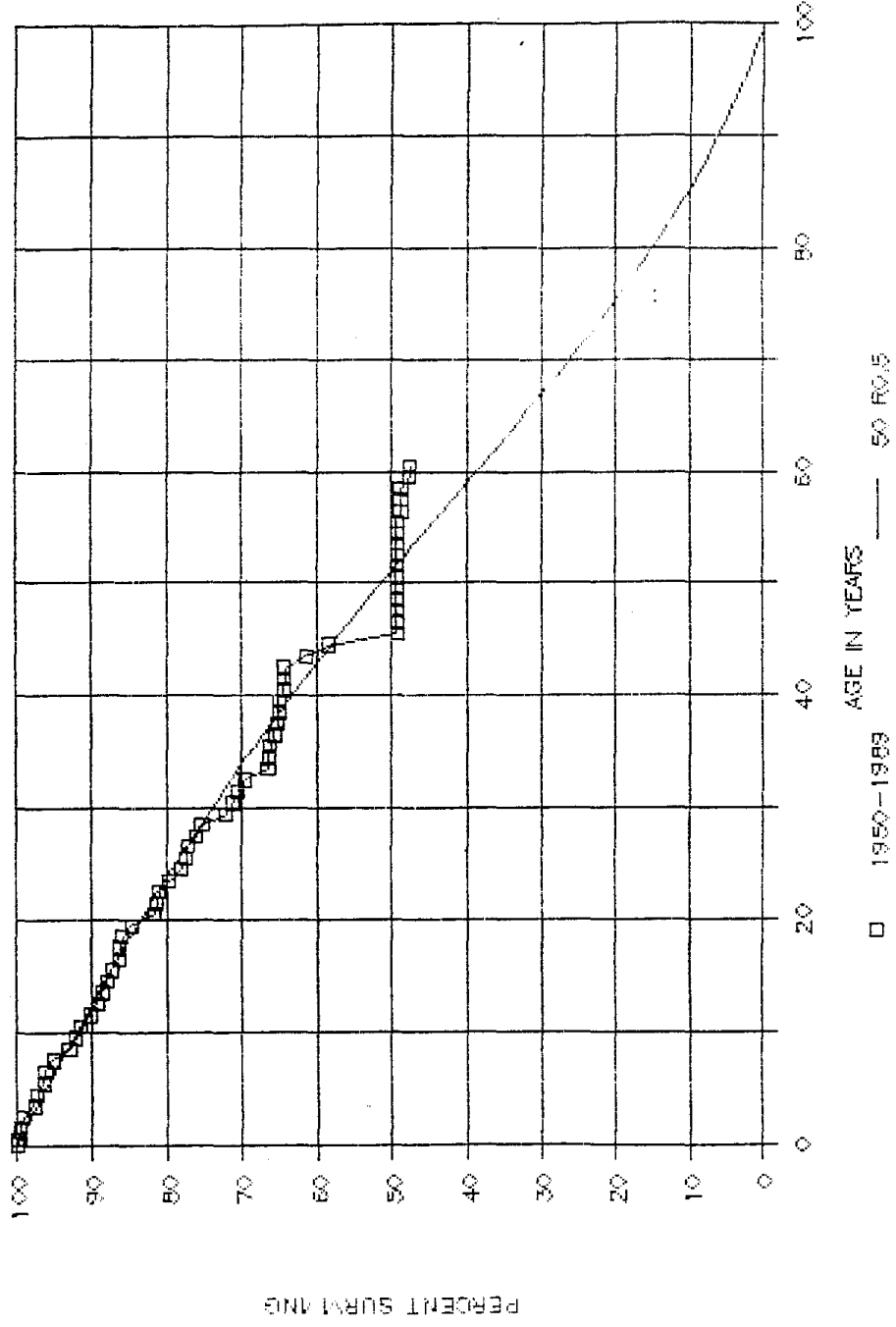
A-5

DELOITTE HASKINS & SELLS   DEPRECIATION SYSTEM - DSSIMBAL02 RELEASE 5.)

STUDY AS OF DECEMBER 31, 1989   PAGE 1

‡‡‡‡ KENTUCKY POWER COMPANY ‡‡‡‡   3-15-1990

SIMULATED PLANT BALANCE METHOD OF LIFE ANALYSIS FOR ACCOUNT 3680000

USING BALANCES PERIOD EQUAL TO LAST 40 YEARS

AVERAGE LIFE AT WHICH BOOK BALS EQUAL SIMULATED BALS AT END OF MOST											INDEX OF VARIATION FOR ANALYSIS OF DATA ENDING IN									
1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	DISP	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
35.4	34.9	34.5	34.0	33.7	33.5	33.3	33.1	33.1	33.1	S0	205	251	275	293	288	275	259	243	226	211
30.6	30.3	30.1	29.8	29.7	29.5	29.5	29.4	29.4	29.4	S-.5	189	234	257	277	272	260	245	229	213	199
27.7	27.5	27.3	27.1	27.0	26.9	26.8	26.8	26.8	26.8	S0	211	245	265	283	278	265	250	233	217	203
26.2	26.0	25.9	25.7	25.6	25.3	25.5	25.4	25.4	25.4	S0.5	236	257	271	287	281	269	254	239	221	207
24.9	24.8	24.6	24.5	24.4	24.3	24.2	24.2	24.2	24.2	S1	279	286	293	305	298	286	271	255	237	221
24.0	23.9	23.8	23.7	23.6	23.6	23.5	23.5	23.5	23.4	S1.5	321	315	313	320	312	299	285	269	251	236
23.2	23.2	23.1	23.0	23.0	22.9	22.9	22.8	22.8	22.8	S2	373	355	345	345	335	323	309	294	275	261
22.5	22.5	22.5	22.4	22.3	22.2	22.2	22.1	22.1	22.0	S3	439	408	389	383	371	358	345	333	315	300
22.0	22.0	22.0	21.9	21.8	21.8	21.7	21.6	21.6	21.5	S4	500	459	432	421	406	392	380	369	352	340
21.8	21.8	21.7	21.7	21.6	21.5	21.5	21.4	21.3	21.2	S5	537	492	459	444	426	412	400	391	375	369
21.6	21.6	21.6	21.6	21.5	21.4	21.3	21.3	21.2	21.1	S6	558	510	474	455	435	420	409	402	388	382
34.1	33.7	33.4	33.0	32.7	32.5	32.4	32.3	32.3	32.2	L0	209	258	284	304	300	287	271	254	236	221
30.8	30.5	30.3	30.0	29.9	29.7	29.6	29.5	29.6	29.5	L0.5	209	253	278	300	297	285	270	253	236	221
28.5	28.3	28.1	27.8	27.7	27.6	27.5	27.4	27.4	27.4	L1	230	266	289	311	308	297	281	264	246	230
26.9	26.7	26.5	26.3	26.2	26.1	26.0	25.9	25.7	25.9	L1.5	254	278	296	315	313	302	288	272	253	237
25.4	25.3	25.1	25.0	24.8	24.7	24.6	24.6	24.6	24.5	L2	297	308	319	336	333	323	309	293	274	258
23.5	23.4	23.3	23.2	23.1	23.0	23.0	22.9	22.9	22.8	L3	387	372	366	372	365	354	341	327	308	293
22.4	22.4	22.4	22.3	22.2	22.1	22.1	22.0	21.9	21.9	L4	461	428	406	400	388	376	364	352	335	322
22.0	22.0	21.9	21.8	21.8	21.7	21.6	21.5	21.5	21.4	L5	512	470	441	429	413	400	389	379	363	354
30.9	30.6	30.4	30.1	30.0	29.9	29.8	29.7	29.7	29.7	R0.5	179	222	244	262	257	245	231	216	200	187
28.1	27.9	27.8	27.6	27.5	27.4	27.3	27.3	27.3	27.3	R1	-175	-208	-226	243	238	227	213	199	185	173
26.3	26.2	26.1	25.9	25.8	25.8	25.7	25.7	25.7	25.7	R1.5	204	220	230	-242	-236	-225	-211	-198	-184	-172
24.8	24.7	24.6	24.5	24.4	24.4	24.3	24.3	24.3	24.3	R2	261	259	258	264	255	242	228	214	199	187
23.8	23.7	23.7	23.6	23.5	23.5	23.4	23.4	23.4	23.4	R2.5	322	305	294	293	281	267	252	239	222	211
23.0	22.9	22.9	22.8	22.8	22.7	22.7	22.7	22.6	22.6	R3	388	359	339	333	318	304	289	276	258	247
22.3	22.2	22.2	22.1	22.1	22.0	22.0	21.9	21.9	21.8	R4	463	426	400	390	374	359	346	334	317	307
21.8	21.8	21.8	21.7	21.7	21.6	21.5	21.4	21.4	21.3	R5	526	482	450	435	418	403	390	380	365	357

THE INDEX OF VARIATION IS MULTIPLIED BY 10 TO OBTAIN A HIGHER LEVEL OF RANKING PRECISION

A-6

DELOITTE HASKINS & SELLS

STUDY AS OF DECEMBER 31, 1989

KENTUCKY POWER COMPANY
ACCOUNT NO.: 10860000
DISTRIBUTION PLANT

YEAR	ADDITIONS	RETIREMENTS	REIMBURSEMENTS AMOUNT	RATIO	SALVAGE AMOUNT	RATIO	COST OF REMOVAL AMOUNT	RATIO	NET SALVAGE W/REIMB.	W/O REIMB.
1954	0.	345614.	0.	0.%	164293.	48.%	66291.	19.%	28.%	28.%
1955	0.	329795.	0.	0.%	163818.	50.%	58960.	21.%	29 %	29.%
1956	0.	340400.	0.	0.%	175637.	52.%	81844.	24.%	28.%	28.%
1957	0.	560530.	0.	0.%	243234.	43.%	141931.	25.%	18.%	18.%
1958	0.	505375.	0.	0.%	206808.	41.%	144792.	29.%	12.%	12.%
1959	0.	624939.	0.	0.%	259031.	41.%	152087.	24.%	17.%	17.%
1960	0.	492849.	0.	0.%	271181.	55.%	161636.	33.%	22.%	22.%
1961	0.	819969.	0.	0.%	381111.	46.%	170331.	21.%	26.%	26.%
1962	0.	558196.	0.	0.%	299388.	54.%	192682.	35.%	19.%	19.%
1963	0.	706977.	0.	0.%	279116.	39.%	194420.	28.%	12.%	12.%
1964	0.	773027.	0.	0.%	304668.	39.%	189822.	25.%	15.%	15.%
1965	0.	1012221.	0.	0.%	374123.	37.%	239135.	24.%	13.%	13.%
1966	0.	1071099.	0.	0.%	450349.	42.%	285103.	27.%	15.%	15.%
1967	0.	1463163.	0.	0.%	413889.	28.%	342901.	23.%	5.%	5.%
1968	0.	1330710.	0.	0.%	670448.	50.%	479783.	36.%	14.%	14.%
1969	0.	1560135.	0.	0.%	646533.	41.%	347617.	22.%	19.%	19.%
1970	0.	1143715.	0.	0.%	400222.	35.%	357897.	31.%	4.%	4.%
1971	0.	1315603.	0.	0.%	543957.	41.%	401721.	31.%	11.%	11.%
1972	0.	1475429.	0.	0.%	752589.	51.%	490837.	33.%	18.%	18.%
1973	0.	1773250.	0.	0.%	703812.	40.%	491738.	28.%	12.%	12.%
1974	0.	1273997.	0.	0.%	921165.	72.%	527796.	41.%	31.%	31.%
1975	0.	1413889.	0.	0.%	633350.	45.%	485488.	34.%	10.%	10.%
1976	0.	1770503.	0.	0.%	905056.	51.%	680443.	38.%	13.%	13.%
1977	0.	1790525.	0.	0.%	1032217.	58.%	928730.	52.%	6.%	6.%
1978	0.	2839810.	0.	0.%	1622814.	57.%	952797.	34.%	24.%	24.%
1979	0.	2379695.	0.	0.%	1368931.	58.%	1048014.	44.%	13.%	13.%
1980	0.	3067886.	0.	0.%	1455926.	47.%	1423814.	46.%	1.%	1.%
1981	0.	4492306.	0.	0.%	1883382.	42.%	1737241.	39.%	3.%	3.%
1982	0.	2552584.	0.	0.%	1586478.	62.%	1503023.	59.%	3.%	3.%
1983	0.	3917704.	0.	0.%	1560432.	40.%	1361570.	35.%	5.%	5.%
1984	0.	2274942.	0.	0.%	1275047.	56.%	1464480.	64.%	-8.%	-8.%
1985	0.	3390814.	0.	0.%	1033246.	30.%	1315547.	39.%	-8.%	-8.%
1986	0.	4122421.	0.	0.%	1703914.	41.%	1814294.	44.%	-3.%	-3.%
1987	0.	5062869.	0.	0.%	2341368.	46.%	1686747.	33.%	13.%	13.%
1988	0.	5092695.	0.	0.%	2009198.	39.%	1881879.	37.%	3.%	3.%
1989	0.	7285672.	0.	0.%	5727263.	79.%	1888999.	26.%	53.%	53.%
	0.	70931308.	0.	0.%	34763996.	49.%	25702580.	36.%	13.%	13.%

ROLLING BAND

| 1954-1958 | 0. | 2081714. | 0. | 0.% | 953792. | 46.% | 503728. | 24.% | 22.% | 22.% |

A-7

DELOITTE HASKINS & SELLS

STUDY AS OF DECEMBER 31, 1989

KENTUCKY POWER COMPANY
ACCOUNT NO.: 10860000
DISTRIBUTION PLANT

YEAR	ADDITIONS	RETIREMENTS	REIMBURSEMENTS		SALVAGE		COST OF REMOVAL		NET SALVAGE	
			AMOUNT	RATIO	AMOUNT	RATIO	AMOUNT	RATIO	W/REIMB.	W/O REIMB.
1955-1959	0.	2361039.	0.	0.%	1048530.	44.%	589614.	25.%	19.%	19.%
1956-1960	0.	2524093.	0.	0.%	1155893.	46.%	682290.	27.%	19.%	19.%
1957-1961	0.	3003662.	0.	0.%	1361365.	45.%	770777.	26.%	20.%	20.%
1958-1962	0.	3001328.	0.	0.%	1417519.	47.%	821528.	27.%	20.%	20.%
1959-1963	0.	3202930.	0.	0.%	1489827.	47.%	871156.	27.%	19.%	19.%
1960-1964	0.	3351018.	0.	0.%	1535464.	46.%	908891.	27.%	19.%	19.%
1961-1965	0.	3870390.	0.	0.%	1638406.	42.%	986390.	25.%	17.%	17.%
1962-1966	0.	4121520.	0.	0.%	1707644.	41.%	1101162.	27.%	15.%	15.%
1963-1967	0.	5026487.	0.	0.%	1822145.	36.%	1251381.	25.%	11.%	11.%
1964-1968	0.	5650220.	0.	0.%	2213477.	39.%	1536744.	27.%	12.%	12.%
1965-1969	0.	6437328.	0.	0.%	2555342.	40.%	1694539.	26.%	13.%	13.%
1966-1970	0.	6568822.	0.	0.%	2581441.	39.%	1813301.	28.%	12.%	12.%
1967-1971	0.	6813326.	0.	0.%	2675049.	39.%	1929919.	28.%	11.%	11.%
1968-1972	0.	6825592.	0.	0.%	3013749.	44.%	2077855.	30.%	14.%	14.%
1969-1973	0.	7268132.	0.	0.%	3047113.	42.%	2089810.	29.%	13.%	13.%
1970-1974	0.	6981994.	0.	0.%	3321745.	48.%	2269989.	33.%	15.%	15.%
1971-1975	0.	7252168.	0.	0.%	3554873.	49.%	2397580.	33.%	16.%	16.%
1972-1976	0.	7707068.	0.	0.%	3915972.	51.%	2676302.	35.%	16.%	16.%
1973-1977	0.	8022164.	0.	0.%	4195600.	52.%	3114195.	39.%	13.%	13.%
1974-1978	0.	9088724.	0.	0.%	5114602.	56.%	3575254.	39.%	17.%	17.%
1975-1979	0.	10194422.	0.	0.%	5562368.	55.%	4095752.	40.%	14.%	14.%
1976-1980	0.	11848419.	0.	0.%	6384944.	54.%	5034078.	42.%	11.%	11.%
1977-1981	0.	14570222.	0.	0.%	7363270.	51.%	6090876.	42.%	9.%	9.%
1978-1982	0.	15332281.	0.	0.%	7917531.	52.%	6665169.	43.%	8.%	8.%
1979-1983	0.	16410175.	0.	0.%	7855149.	48.%	7073942.	43.%	5.%	5.%
1980-1984	0.	16305422.	0.	0.%	7761265.	48.%	7490128.	46.%	2.%	2.%
1981-1985	0.	16628350.	0.	0.%	7338585.	44.%	7381861.	44.%	0.%	0.%
1982-1986	0.	16258465.	0.	0.%	7159117.	44.%	7458914.	46.%	-2.%	-2.%
1983-1987	0.	18768750.	0.	0.%	7914007.	42.%	7642638.	41.%	1.%	1.%
1984-1988	0.	19943741.	0.	0.%	8362773.	42.%	8162947.	41.%	1.%	1.%
1985-1989	0.	24954471.	0.	0.%	12814989.	51.%	8587466.	34.%	17.%	17.%

KENTUCKY POWER COMPANY
Distribution Plant Net Salvage Test

					Retirements								Net	
Year	361	362	364	365	366	367	368	369	370	371	373	Total	Salvage	Weighted
	$	$	$	$	$							$	%	
1975	4,142	325,372	258,071	230,227	0	1,477	253,830	168,457	105,836	64,832	16,546	1,428,790	10	14,288
1976	744	482,265	328,987	302,893	138	2,083	265,974	176,814	144,244	66,077	4,177	1,774,396	13	23,067
1977	0	252,200	376,298	369,728	0	3,175	312,212	177,138	249,384	58,498	15,865	1,816,498	6	10,899
1978	1,144	600,488	541,825	472,645	216	175	627,160	201,569	174,912	67,643	28,008	2,715,785	24	65,179
1979	(99)	203,011	638,797	516,238	0	8,720	411,317	322,670	196,583	87,903	17,100	2,402,240	13	31,229
1980	5,482	489,660	714,013	532,297	13,388	18,792	707,768	216,061	217,875	114,552	37,188	3,067,076	1	3,067
1981	11,139	961,140	1,253,167	876,800	71	6,687	1,160,266	281,371	261,646	124,056	53,310	4,989,653	3	14,969
1982	0	196,085	635,786	452,557	0	5,334	667,258	166,004	248,786	102,664	44,775	2,519,249	3	7,558
1983	489	128,249	768,785	598,823	78	8,742	816,897	319,764	279,281	156,108	28,192	3,105,408	5	15,527
1984	15,027	293,708	808,923	517,838	3,998	1,761	509,740	304,542	385,107	152,915	13,841	3,007,400	-8	(24,059)
1985	159	376,843	937,730	519,259	5,819	5,814	640,462	281,524	388,485	184,064	37,932	3,378,091	-8	(27,025)
1986	2,048	199,948	1,438,007	919,744	896	8,069	714,994	304,874	350,900	195,928	40,399	4,175,807	-3	(12,527)
1987	4,659	331,975	1,607,747	1,004,247	6,968	20,306	784,243	429,089	373,822	421,123	73,264	5,057,443	13	65,747
1988	3,211	151,611	1,966,798	1,118,810	172	12,299	601,750	392,321	409,799	257,746	110,040	5,023,957	3	15,072
1989	6,295	259,802	3,823,950	899,096	3,823	8,169	1,161,193	374,843	320,905	291,379	109,998	7,259,453	53	384,751
TOTAL	54,440	5,251,757	16,100,884	9,331,202	35,567	111,603	9,635,064	4,117,041	4,107,565	2,345,408	630,635	51,721,246	11	587,741

EVALUATION BASED ON 1975-1989 ACTUAL

	361	362	364	365	366	367	368	369	370	371	373	Total
Total Retmts	54,440	5,251,757	16,100,884	9,331,202	35,567	111,603	9,635,064	4,117,041	4,107,565	2,345,408	630,635	51,721,246
Net Salvage, %	0	25	0	25	0	0	15	0	0	30	15	11
Net Salvage, $	0	1,312,939	0	2,332,801	0	0	1,445,260	0	0	703,646	94,595	5,889,241

A-8

A-9

DELOITTE HASKINS & SELLS   DEPRECIATION SYSTEM - DSALG01 RELEASE 5.0

STUDY AS OF DECEMBER 31, 1989   PAGE 1

                    KENTUCKY POWER COMPANY   .   11- 2-1990

                AVERAGE LIFE GROUP METHOD THEORETICAL RESERVE
                          ACCOUNT 35300000

			REMAINING		
		SURVIVING	LIFE		
	VINTAGE	BALANCE	ASL CURVE	RESERVE	THEORETICAL
AGE	YEAR	12/31/1989	50.0 R0.5	RATIO	RESERVE
0.5	1989	1247738.	49.6904	0.00619	7725.
1.5	1988	574176.	49.0704	0.01859	10675.
2.5	1987	893616.	48.4521	0.03096	27665.
3.5	1986	1139198.	47.8355	0.04329	49316.
4.5	1985	1686248.	47.2206	0.05559	93733.
5.5	1984	78286.	46.6075	0.06785	5312.
6.5	1983	1200975.	45.9960	0.08006	96175.
7.5	1982	8064.	45.3860	0.09228	744.
8.5	1981	640224.	44.7777	0.10445	66869.
9.5	1980	15638250.	44.1709	0.11658	1823146.
10.5	1979	917014.	43.5655	0.12869	118010.
11.5	1978	88898.	42.9616	0.14077	12514.
12.5	1977	1186500.	42.3591	0.15282	181319.
13.5	1976	391512.	41.7579	0.16484	64538.
15.5	1974	1037.	40.5593	0.18881	196.
16.5	1973	16220.	39.9619	0.20076	3256.
17.5	1972	379846.	39.3658	0.21268	80787.
18.5	1971	402046.	38.7711	0.22458	90290.
19.5	1970	682067.	38.1780	0.23644	161268.
20.5	1969	9870865.	37.5865	0.24827	2450635.
21.5	1968	509774.	36.9969	0.26006	132573.
22.5	1967	237071.	36.4092	0.27182	64440.
23.5	1966	236739.	35.8237	0.28353	67122.
24.5	1965	494885.	35.2405	0.29519	146085.
25.5	1964	350263.	34.6598	0.30680	107462.
26.5	1963	957722.	34.0818	0.31836	304904.
27.5	1962	467496.	33.5066	0.32987	154212.
28.5	1961	188471.	32.9345	0.34131	64327.
29.5	1960	36134.	32.3654	0.35269	12744.
30.5	1959	109152.	31.7998	0.36400	39732.
31.5	1958	102410.	31.2376	0.37525	38429.
32.5	1957	6362.	30.6790	0.38642	2458.
33.5	1956	59095.	30.1241	0.39752	23491.

A-10

DELOITTE HASKINS & SELLS   DEPRECIATION SYSTEM - DSALG01 RELEASE 5 0

STUDY AS OF DECEMBER 31, 1989   PAGE 2

                        KENTUCKY POWER COMPANY   11- 2-1990

                  AVERAGE LIFE GROUP METHOD THEORETICAL RESERVE
                            ACCOUNT 35300000

AGE	VINTAGE YEAR	SURVIVING BALANCE 12/31/1989	REMAINING LIFE ASL CURVE 50.0 R0.5	RESERVE RATIO	THEORETICAL RESERVE
34.5	1955	107920.	29.5731	0.40854	44089.
35.5	1954	10322.	29.0261	0.41948	4330.
36.5	1953	94036.	28.4832	0.43034	40467.
37.5	1952	511233.	27.9445	0.44111	225510.
38.5	1951	244718.	27.4101	0.45180	110563.
39.5	1950	10028.	26.8801	0.46240	4637.
40.5	1949	102150.	26.3545	0.47291	48308.
41.5	1948	39284.	25.8333	0.48333	18987.
42.5	1947	3620.	25.3168	0.49366	1787.
43.5	1946	42757.	24.8048	0.50390	21545.
44.5	1945	201906.	24.2974	0.51405	103790.
45.5	1944	78195.	23.7946	0.52411	40983.
46.5	1943	8615.	23.2965	0.53407	4601.
47.5	1942	264003.	22.8030	0.54394	143602.
48.5	1941	31105.	22.3143	0.55371	17223.
49.5	1940	23256.	21.8301	0.56340	13102.
50.5	1939	32393.	21.3506	0.57299	18561.
51.5	1938	33393.	20.8756	0.58249	19451.
52.5	1937	156492.	20.4052	0.59190	92627.
53.5	1936	63281.	19.9393	0.60121	38045.
54.5	1935	10727.	19.4779	0.61044	6548.
55.5	1934	2984.	19.0208	0.61958	1849.
57.5	1932	6986.	18.1194	0.63761	4454.
59.5	1930	424895.	17.2348	0.65530	278436.
60.5	1929	136693.	16.7984	0.66403	90768.

                        43439346.   7896418.

                              NET SALVAGE VALUE(%)   25.

                              RESERVE AFTER SALVAGE   5922313.

                              REMAINING LIFE (YRS)   40.91