KPSC Case No. 2005-00341 Commission Staff 1<sup>st</sup> Set Data Request Order Dated September 21, 2005 Item No. 48 Page 1 of 1

#### **Kentucky Power Company**

#### REQUEST

Provide all current labor contracts and the most recent contracts previously in effect.

#### RESPONSE

There are four labor contracts for Kentucky Power Company and copies of each are attached, as follows:

- 1. Agreement between Kentucky Power Company and Local Union 978 Ashland District Bargaining Unit May 1,2004 April 30,2007
- 2. Agreement between Kentucky Power Company and Local Union 978 Hazard District Bargaining Unit May 1,2004 April 30,2007
- 3. Agreement between Kentucky Power Company and Local Union 978 Hazard District Field Revenue Operations Bargaining Unit May 1,2004 April 30,2007
- 4. Agreement between Kentucky Power Company and Local Union 978 Pikeville District Field Revenue Operations Bargaining Unit May 1,2004 April 30,2007

WITNESS: Errol Wagner

KPSC Case No. 2005-00341 Commission Staff 1<sup>st</sup> Set Data Request Order Dated September 21,2005 Item No. 49 Page 1 of 3

#### **Kentucky Power Company**

#### **REQUEST**

Provide a detailed analysis of all benefits provided to the employees of Kentucky Power. For each benefit include:

- a. The number of employees covered at test-year end.
- b. The test-year actual cost.
- c. The amount of test-year actual costs capitalized and expensed.
- d. The average annual cost per employee.

#### RESPONSE

- (a) (b) (d) Attached is a detailed analysis of all benefits provided to the employees of KPCo.
- (c) Attached is the test year actual costs capitalized and expensed.

WITNESS: R. K. Wohnhas

KPSC Case No. 2005-00341 Commission Staff First Set Data Request Order Dated September 21, 2005 Item No. 49-a, b, d Page 2 of 3

#### KENTUCKY POWER COMPANY

Plan	Kentucky
Retirement (9260002 & 9260003) Total Account 9260002 & 9260003	1,051,138
Dependent Life (9260004) Life Insurance (9260004) Accidental Death & Dismemberment Insurance (9260004) Total Account 9260004	93,378
Group Medical (9260005) Prescription Drug (9260005) Behavior Health/Employee Assistance (9260005) Total Account 9260005	3,118,484
Long-Term Disability (9260007) Total Account 9260007	118,480
Dental (9260009) Total Account 9260009	184,881
Retirement Savings(9260027) Total Account 9260027	1,109,927
Sick Pay	821,117
Flexible Spending Long-Term Care Vision	No cost for the Companies - Employee cost only No cost for the Companies - Employee cost only No cost for the Companies - Employee cost only
TOTAL Number of Active Employees Average Annual Cost per Employee	\$6,497,403.76 443 \$14,666.83

KPSC Case No. 2005-00341 Commission Staff First Set Data Request Order Dated September 21, 2005 Item 49 c Page 3 of 3

KYCo Source Accounts KYCo 107xxxx Accounts KYCo Other Balance Sheet Accounts KYCo Expense Accounts

	111000	aloc Mocouli				11.00 10.	AAAA (1000)			THE SHIELD BLIADE SHEET ASSUME			TO BE EXPERISE ACCOUNTING							
																				KYC <sub>0</sub>
Month/				KYCo Source	Month/				KYCo 107xxxx	Month/					KYCo Other	Month/				Expense
Year Type	110	117	180	Totals	Year Type	110	117	180	Totals	Year	Type	110	117	180	Totals	Year T	ype 110	117	180	Totals
01/2004 Pension	10,184.38	17,373.23	10,678.81	38,236.42	01/2004 Pension	(8,890.39)	(268.73)	1,697,13	(7,461.98)	01/2004	ension	(4,071.29)	(956.48)	224.56	(4,803.21)	01/2004 Pens	sion 23,146.	18,598	.44 8,757.12	50,501.62
01/2004 Insurance	163,879.74	96,615.84	40,335.85	300,831.43	01/2004 Insurance	39,639.25	4,041.30	10,901,67	54,582,22	01/2004 i	nsurance	18,152.51	14,384.39	1,442.51	33,979.41	01/2004 Insu	rance 106,087.	8 78,190	1.15 27,991.67	212,269.80
01/2004 Savings	35,063.77	24,822.98	8,958.34	68,845.09	01/2004 Savings	9,398.41	1,007.72	2,715,41	13,121.53	01/2004	Savings	4,303.93	3,586.82	359.30	8,250.06	01/2004 Savi	ngs 21,361.	3 20,228	1.44 5,883.63	47,473.50
01/2004 OPEB	236,880.00	122,575.00	31,596.00	391,051.00	01/2004 OPEB	50,449.95	4,799.05	3,847.65	59,096.65	01/2004	OPEB	23,103.20	17,081.46	509.12	40,693.78	01/2004 OPE	B 163,326.	100,69	.49 27,239.23	291,260.58
02/2004 Pension	10,343.23	17,434.36	10,685.57	38,463.16	02/2004 Pension	(10,486.78)	(182.37)	2,441.70	(8,227.45)	02/2004 I	Pension	(5,422.37)	(1,175.70)	231.86	(6,366.21)	02/2004 Pens	sion 26,252.	8 18,792	.43 8,012.01	53,056.82
02/2004 Insurance	157,848.43	94,072.74	40,186.07	292,107.24	02/2004 Insurance	47,327.99	2,782.13	15,910.67	66,020.79	02/2004 I	nsurance	24,471.75	17,935.56	1,510.85	43,918.16	02/2004 Insu	rance 86,048.	9 73,355	i.06 22,764.54	182,168.29
02/2004 Savings	38,144.57	24,289.37	9,103.82	71,537.76	02/2004 Savings	11,086.03	683.90	3,906.73	15,676.65	02/2004	Savings	5,732.22	4,408.87	370.98	10,512.07	02/2004 Savi	ngs 21,326.	2 19,196	6.60 4,826.12	45,349,04
02/2004 OPEB	236,880.00	122,575.00	31,596.00	391,051.00	02/2004 OPEB	60,235.63	3,303.78	5,615.53	69,154.94	02/2004	OPEB	31,145.86	21,298.47	533.24	52,977.58	02/2004 OPE	B 145,498.	1 97,972	.75 25,447.23	268,918.49
03/2004 Pension	15,501.46	20,108.68	12,390.43	48,000.57	03/2004 Pension	(9,672.82)	(292.52)	1,957.75	(8,007.58)	03/2004	Pension	(4,772.86)	(1,218.31)	320.09	(5,671.08)	03/2004 Pens	sion 29,947.	4 21,619	.51 10,112.59	61,679.23
03/2004 Insurance	161,905.95	93,709.87	40,085.09	295,700.91	03/2004 Insurance	48,719.46	4,286.08	14,815.66	67,821.19	03/2004 1	nsurance	24,039.67	17,851.15	2,422.33	44,313.15	03/2004 Insu	rance 89,146.	2 71,572	.64 22,847.10	183,566.57
03/2004 Savings	64,331.85	51,375.64	13,420.96	129,128,45	03/2004 Savings	10,225.55	1,096.94	3,132.41	14,454.90	03/2004		5,045.60	4,568.65	512.14	10,126.40	03/2004 Savi				104,547.16
03/2004 OPEB	158,590.00	74,821.00	22,450.00	255,861.00	03/2004 OPEB	62,006.59	5,089.72	5,229.05	72,325.36	03/2004	OPEB	30,595.94	21,198.24	854.94	52,649.12	03/2004 OPE	B 65,987.	7 48,533	.04 16,366.01	130,886.52
04/2004 Pension	16,301.51	20,428,23	12,460.13	49,189.87	04/2004 Pension	(14,632.23)	(542.36)	3,395.20	(11,779.39)	04/2004	Pension		(1,444.68)	221.75	(8,611.48)	04/2004 Pens			.27 8,843.18	69,580.74
04/2004 Insurance	164,173.38	92,626.00	40,178.80	296,978.18	04/2004 Insurance		8,137.43	21,931.69	95,363.32		nsurance		21,675.58	1,432.45	56,078.38	04/2004 Insu				145,536.48
04/2004 Savings	54,239.38	42,508.75	14,002.86	110,750.99	04/2004 Savings	15,468.36	2,033,85	5,432,32	22,934.53	04/2004	Savings	7,810.76	5,417,54	354.81	13,583.11	04/2004 Savi	ngs 30,960.	6 35,057	.36 8,215.73	74,233.35
04/2004 OPEB	225,620.00	120,445,00	30,350.00	376,415,00	04/2004 OPEB	83,101.71	9,663.19	7,740.60	100,505.50	04/2004	OPEB		25,739.75	505.57	68,207.59	04/2004 OPE			.05 22,103.84	207,701.91
05/2004 Pension	24,787.75	25,148,63	15,598.96	65,535.34	05/2004 Pension	3,365.41	990.42	5,637,18	9,993.02	05/2004	Pension	1,637.86	2,470.09	509.99	4,617.94	05/2004 Pens				50,924.39
05/2004 Insurance	157,142.94	91,662,80	40,446.60	289,252,34	05/2004 Insurance	51,259.43	5,943.86	20,215,31	77,418.59	05/2004	nsurance	24,946.58	14,823.88	1,828.87	41,599.32	05/2004 Insu	rance 80,936.	3 70,895	.07 18,402.43	170,234.42
05/2004 Savings	39,178.88	26,380.69	9,772.23	75,331.80	05/2004 Savings	12,452.03	1,584.67	5,010.83	19,047.53	05/2004	Savings	6,060.07	3,952,14	453.33	10,465.53	05/2004 Savi	ngs 20,666.	8 20,843		45,818.73
05/2004 OPEB	203,104.47	116,182.27	50,140.86	369,427.60	05/2004 OPEB	67,278.00	7,058.33	7,134.81	81,471.15	05/2004	DPEB	32,742.38	17,603.35	645.48	50,991.22	05/2004 OPE	B 103,084.0	8 91,520	.59 42,360.56	236,965.23
06/2004 Pension	15,731.60	20,241.97	12,393.73	48,367.30	06/2004 Pension	2,753.46	691.42	3,315,20	6,760.08	06/2004 F	Pension	1,260.95	2,384.35	459.03	4,104.34	06/2004 Pens	sion 11,717.	8 17,166	.20 8,619.50	37,502.88
06/2004 Insurance	158,318.91	90,441.82	40,363,62	289,124.35	06/2004 Insurance	41,544.07	4,135.55	10,505.38	56,185.01	06/2004	nsurance	19,025.19	14,261.42	1,454.61	34,741.22	06/2004 Insu	rance 97,749.	4 72,044	.85 28,403,63	198,198.12
06/2004 Savings	54,942.24	25,950.75	10,172.69	91,065,68	06/2004 Savings	10,187.82	1,106.27	2,946.84	14,240.93	06/2004	Savings	4,665.53	3,814.96	408.03	8,888.52	06/2004 Savi	ngs 40,088.	9 21,029	.52 6,817.82	67,936.23
06/2004 OPEB	22,084.14	(153,131.27)	6,764.95	(124,282.18)	06/2004 OPEB	54,526,60	4,910.97	10,505,38	69,942.95	06/2004	PEB	24,970.57	16,935.43	1,454.61	43,360.61	06/2004 OPE	B (57,413.6	2) (174,977	.67) (5,195.04	(237,585.74)
07/2004 Pension	14,791.04	19,850.67	12,300.19	46,941.90	07/2004 Pension	2,746.36	745.50	3,417.57	6,909.42	07/2004	Pension	1,385.75	2,399.69	317.76	4,103.21	07/2004 Pens	sion 10,658.	3 16,705	.48 8,564.86	35,929.27
07/2004 Insurance	162,575.23	89,641.11	39,735.84	291,952.18	07/2004 Insurance	41,661.51	4,462.81	10,756.51	56,880.83	07/2004 1	nsurance	21,021.49	14,365.36	1,000.13	36,386.99	07/2004 Insu	rance 99,892.	2 70,812	.94 27,979.20	198,684.36
07/2004 Savings	38,367.90	25,590.96	9,395.81	73,354.67	07/2004 Savings	10,161,52	1,192.80	3,037.84	14,392.15	07/2004	Savings	5,127.28	3,839.51	282.46	9,249.25	07/2004 Savi:	ngs 23,079.	0 20,558	6,075,51	49,713.27
07/2004 OPEB	138,593.00	76,244.00	41,096.00	255,933.00	07/2004 OPEB	51,515.26	4,533.51	10,396.53	66,445.30	07/2004 (	OPEB	25,993.48	14,592.92	966.66	41,553.07	07/2004 OPE	B 61,084.	5 57,117	.57 29,732.80	147,934.62
08/2004 Pension	14,675.02	19,742.98	12,261.36	46,679,36	08/2004 Pension	3,313.63	637.59	3,859.68	7,810.90	08/2004	Pension	1,471.60	2,586.53	873.00	4,931.13	08/2004 Pens	sion 9,889.	9 16,518	.86 7,528.68	33,937.33
08/2004 Insurance	148,195.76	86,198.79	37,497.31	271,891.86	08/2004 Insurance	50,354.68	3,885.27	12,714.79	66,954.75	08/2004 1	nsurance	22,362.83	15,761.50	2,875.88	41,000.20	08/2004 Insu	rance 75,478.	5 66,552	.02 21,906.64	163,936.91
08/2004 Savings	40,337.51	27,302.60	9,663.63	77,303.74	08/2004 Savings	11,909.14	1,020.15	3,430.83	16,360.12	08/2004 9	Savings	5,288.92	4,138,45	776.00	10,203.37	08/2004 Savi	ngs 23,139.	4 22,144	.00 5,456.81	50,740.25
08/2004 OPEB	136,270.00	74,874.00	40,639.00	251,783,00	08/2004 OPEB	53,306,14	3,156.79	11,405.75	67,868.67	08/2004	DPEB	23,673.58	12,806.22	2,579.79	39,059.60	08/2004 OPE	B 59,290.3	8 58,911	.00 26,653.46	144,854,74
09/2004 Pension	14,716.50	19,857.45	12,305.06	46,879.01	09/2004 Pension	2,793.35	655.15	4,047.06	7,495.57	09/2004	ension	2,069.29	2,317.18	1,479.56	5,866.03	09/2004 Pens	sion 9,853.	6 16,885	.12 6,778.44	33,517.42
09/2004 Insurance	146,261.13	85,432.32	37,233.68	268,927,13	09/2004 Insurance	43,809.47	4,019.67	14,295.42	62,124.56	09/2004 1	nsurance	32,453.61	14,217.06	5,226.23	51,896.90	09/2004 Insu	rance 69,998.	6 67,195	.59 17,712.03	154,905.67
09/2004 Savings	41,220.20	25,694.35	9,816.84	76,731,39	09/2004 Savings	9,776.74	1,048.24	3,597.39	14,422.37	09/2004 \$	Savings	7,242.51	3,707.49	1,315.16	12,265.16	09/2004 Savi	ngs 24,200.	5 20,938	.62 4,904.29	50,043,86
09/2004 OPEB	136,270.00	74,874.00	40,639.00	251,783,00	09/2004 OPEB	43,809.47	3,265.98	12,508,49	59,583.94	09/2004 (	OPEB	32,453.61	11,551.36	4,572.95	48,577.92	09/2004 OPE	B 60,006.	2 60,056	.66 23,557.55	143,621.14
10/2004 Pension	14,800.52	19,849.25	12,298.85	46,948.62	10/2004 Pension	4,971.48	766.92	7,206.09	12,944.50	10/2004	ension	2,979.53	3,756.45	1,094.54	7,830.51	10/2004 Pens	sion 6,849.	2 15,325	.88 3,998.22	26,173.61
10/2004 Insurance	149,722.20	85,508.13	36,985.88	272,216,21	10/2004 Insurance	78,071.37	4,711.93	25,460.90	108,244.20	10/2004 I	nsurance	46,790.02	23,079.41	3,867.27	73,736.70	10/2004 Insu	rance 24,860.	1 57,716	.79 7,657.71	90,235.31
10/2004 Savings	61,193.27	37,330.97	14,253.28	112,777.52	10/2004 Savings	17,400.18	1,227.08	6,405.42	25,032.67	10/2004 \$	Savings	10,428.34	6,010.32	972.92	17,411.58	10/2004 Savi	ngs 33,364.	5 30,093	.57 6,874.94	70,333.26
10/2004 OPEB	136,270.00	74,874.00	40,956.00	252,100.00	10/2004 OPEB	78,071.37	3,828.44	22,278.29	104,178.10	10/2004	DPEB	46,790.02	18,752.02	3,383.86	68,925.90	10/2004 OPE	B 11,408.0	1 52,293	.54 15,293.85	78,996.00
11/2004 Pension	14,672.75	19,796.49	12,286.32	46,755.56	11/2004 Pension	3,699.55	973.98	4,718.09	9,391.62	11/2004 F	ension	1,656.02	2,468.46	894.58	5,019.06	11/2004 Pens	sion 9,317.	9 16,354	.04 6,673.66	32,344.89
11/2004 Insurance	147,599.75	90,647.50	36,289.13	274,536.38	11/2004 insurance	53,518.24	5,690.74	15,865.08	75,074.06	11/2004 I	nsurance	23,956.19	14,422.63	3,008.11	41,386.93	11/2004 Insu	rance 70,125.	2 70,534	.13 17,415.94	158,075.39
11/2004 Savings	36,468.50	27,303.24	9,062.36	72,834.10	11/2004 Savings	12,948.43	1,558.37	4,438.30	18,945.11	11/2004 5	Savings	5,796.06	3,949.54	841.53	10,587.13	11/2004 Savi	ngs 17,724.0			43,301.86
11/2004 OPEB	136,270.00	74,874.00	40,639.00	251,783.00	11/2004 OPEB	53,518.24	4,623.73	13,391.74	71,533.71	11/2004 (	OPEB	23,956.19	11,718.39	2,539.15	38,213.73	11/2004 OPE	B 58,795.	7 58,531	.89 24,708.11	142,035.56
12/2004 Pension	15,559.90	20,136.27	12,361.40	48,057.57	12/2004 Pension	3,548.90	995.02	4,226.48	8,770.40	12/2004 F	ension	1,378.30	2,341.55	598.70	4,318.55	12/2004 Pens	sion 10,632.0	9 16,799	.70 7,536.23	34,968.62
12/2004 Insurance	146,467.06	91,310.18	35,612.71	273,389.95	12/2004 Insurance	50,779.97	5,469.78	14,780.53	71,030.29	12/2004 1	nsurance	19,721.67	12,871.80	2,093.72	34,687.19	12/2004 Insu	rance 75,965.	1 72,968	.60 18,738.46	167,672.47
12/2004 Savings	53,233.06	28,352.51	9,050.16	90,635.73	12/2004 Savings	12,421.16	1,592.04	4,226.48	18,239.67	12/2004 5	Savings	4,824.07	3,746.48	598,70	9,169.24	12/2004 Savis	ngs 35,987.8	3 23,013	.99 4,224.99	63,226.81
12/2004 OPEB	136,267.47	74,871.17	40,637.96	251,776.60	12/2004 OPEB		4,444.20	12,009.18	67,233.35	12/2004 (	OPEB	19,721.67	10,458.34	1,701.14	31,881.16	12/2004 OPE	B 65,765.	2 59,968	.63 26,927.63	152,662.09
			<b>Grand Total</b>	8,211,941.78			•	Grand Total	1,988,506,69				Gr	and Total	1,256,866.02		="		<b>Grand Tota</b>	4,966,569.07

KPSC Case No. 2005-00341 Commission Staff 1<sup>st</sup> Set Data Request Order Dated September 21, 2005 Item No. 50 Page 1 of 139

#### **Kentucky Power Company**

#### REQUEST

Provide complete details of the financial reporting and rate-making treatment of Kentucky Power's pension costs.

#### RESPONSE

Kentucky Power Company records and reports pensions in accordance with generally accepted accounting principles per FAS 87. Copies of the 2005 pension actuarial reports for (a) the American Electric Power System Retirement Plan (labeled as the East Plan) is attached in Pages 2 through 70 and (b) the Central and South West Corporation Cash Balance Retirement Plan (labeled as the West Plan), which includes costs for KPCo, is attached in Pages 71 through 139.

For ratemaking purposes, KPCo adjusts its FAS 87 book expense to reflect the latest actuarial report, as discussed in the testimony of Witness Ranie Wohnhas. The testimony of Witness Errol Wagner also discusses pension-related adjustments (a) to remove from equity the effect of the minimum pension liability on accumulated other comprehensive income and (b) to add pension prepayments to rate base.

WITNESS: Errol Wagner/Hugh McCoy

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American Electric Power Retirement Plan — East

## **Actuarial Valuation Report**

Pension Cost for Fiscal Year Ending December 31, 2005

Employer Contributions for Plan Year Beginning January 1, 2005

March 2005



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# Management Summary of Valuation Results

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FAS 87 Pension Cost and Funded Position	MS-7
Employer Contributions and ERISA Funded Position	MS-10
Actuarial Certification	<i>MS-13</i>



#### **Financial Results**

This report summarizes financial results for American Electric Power's (AEP) Retirement Plan for East Employees based on actuarial valuations as of January 1, 2005, and January 1, 2004.

	January 1, 2005		Jan	uary 1, 2004
FAS 87 Pension Cost				
Amount	\$	48,522,750	\$	16,123,936
Percent of covered pay		4.6%		1.5%
FAS 87 Funded Position				
Accumulated benefit obligation [ABO]	\$	2,865,596,559	\$	2,556,986,820
Fair value of assets [FV]		2,395,158,061		2,277,129,710
ABO funded percentage [FV ÷ ABO]		83.6%		89.1%
Prepaid (accrued) pension cost	\$	138,652,941	\$	138,652,941
Employer Contributions				
Minimum required	\$	0	\$	0
Percent of covered pay		0.0%		0.0%
Maximum deductible	\$	862,646,399	\$	24,654,406
Percent of covered pay		81.5%		2.2%
ERISA Funded Position	ъ.		,	
Actuarial accrued liability [AAL]	\$	2,290,303,649	\$	2,212,339,296
Actuarial value of assets [AV]		2,412,147,355		2,505,032,141
AAL funded percentage [AV + AAL]		105.3%		113.2%
Current liability funded percentage:				
► Selected interest rate		90.7%		99.6%
► Highest allowable interest rate		90.7%		102.9%



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#### **Discussion of Financial Results**

The financial results of AEP's East Retirement Plan were affected by the following factors:

- Investment returns during the prior year were higher than expected, which increased the funded percentage and decreased the pension cost.
- ► Improved data for the terminated vested population increased liabilities, which increased the pension cost and decreased the funded status.
- Long-term bond yields decreased during the prior year resulting in a lower FAS 87 discount rate, which increased the pension cost.
- The Pension Funding Equity Act provided current liability interest rate relief for the 2004 and 2005 plan years. This increased the current liability funded percentage. There is no minimum required contribution for 2005.

### **Highlights**

#### **Economic Assumptions**

The discount rate for pension cost purposes reflects the time value of money as the measurement date. This rate is based on high-grade bond yields, after allowing for call and default risk. Historically, AEP selected a single discount rate for all plans: Moody's Aa corporate bond rate, rounded up to the next quarter of a percent. AEP now selects a rate based on each plan's expected cash flows. The duration of AEP's pension plans is 10.3 years. The following benchmark bond yields illustrate change in the markets during 2004:

	December 31, 2004	December 31, 2003
30-year Treasury	4.83%	5.07%
Merrill Lynch 10+ High Quality	5.62%	5.84%
Moody's Aa	5.66%	6.01%

The assumed rate of return on assets for pension cost purposes is the weighted average of expected long-term asset return assumptions. The salary increase rate is a long-term rate based on current expectations of future pay increases. The assumptions for pension cost purposes are:

	December 31, 2004	December 31, 2003
Discount rate	5.50%	6.25%
Rate of return on assets	8.75%	8.75%
Salary increase rate	Rates vary by age from 3.50% to 8.50%	Rates vary by age from 3.50% to 8.50%



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Assumptions used to determine statutory contribution limits must be reasonable taking into account the experience of the plan and reasonable expectations. The discount rate used to determine the normal cost and actuarial accrued liability is based on the long-term expected return on assets. The current liability interest rate must be within the permissible range as issued by the IRS. The Pension Funding Equity Act extended interest rate relief for the 2004 and 2005 plan years. That range and assumptions for contribution purposes are:

	January 1, 2005	January 1, 2004
Discount rate for normal cost and actuarial accrued liability	8.50%	8.50%
Current liability interest rate:		
► Permissible range	4.59% to 6.10%	4.72% to 6.55%
► Selected rate	6.10%	6.29%
Salary increase rate	Rates vary by age from 3.50% to 8.50%	Rates vary by age from 3.50% to 8.50%

#### **Demographic Assumptions**

The cost of providing plan benefits depends on demographic factors such as retirement, mortality and turnover. Demographic assumptions used in the valuation were selected to reflect the experience of the covered population and reasonable expectations. If actual experience is more favorable than assumed, future plan costs will be lower. Alternatively, if actual experience is less favorable than assumed, future plan costs will be higher. The mortality table was changed from the 1983 Group Annuity Mortality Table to the 1994 Group Annuity Mortality Table to value all liabilities except for current liability purposes. The lump sum election percentage was changed from 100% electing lump sums to 75% electing lump sums and 25% electing life annuities. No other demographic assumptions have changed since the prior valuation.

#### **Assets**

In the year ended December 31, 2004, the plan's portfolio achieved a 12.9% investment return (net of expenses), while the capital markets performed as follows:

Large equities [S&P 500]	10.9%
Intermediate/small equities [Russell 2500]	18.3%
Non-U.S. equities [EAFE]	20.2%
Bonds [Lèhman Brothers Aggregate]	4.3%
Cash equivalents [Salomon Brothers 90-Day T-Bill]	1.2%

#### **Changes in Benefits Valued**

There have been no changes in benefits valued since the prior year.



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#### **PBGC Reporting Requirements**

Participants must be notified of the plan's funded position if the plan is required to pay a variable PBGC premium and the funded percentage is below a specified "gateway" percentage. The plan is not expected to pay a variable PBGC premium for 2005. Also, the plan's current liability funded percentage is above the "gateway" percentage for both 2005 and 2004. Consequently, no participant notice is required.

Additional financial and actuarial information must be provided to the PBGC if, at the end of the year, all defined benefit plans within the controlled group have an unfunded vested liability of \$50 million or more using assumptions mandated by the PBGC. In accordance with PBGC guidance, this includes the use of an interest rate equal to 100% of the yield on 30-year U.S. Treasury bonds for information years ending in 2004. As of December 31, 2004, unfunded vested liabilities for all defined benefit plans within the controlled group were more than \$50 million. Consequently, additional financial and actuarial information must be provided to the PBGC. The due date for the PBGC filing is 105 days after the end of the company's fiscal year.

#### FAS 87 Pension Cost and Funded Position

Pension cost is the amount recognized in AEP's financial statement as the cost of the pension plan and is determined in accordance with Financial Accounting Standard No. 87. The fiscal 2005 pension cost for the plan is \$48,522,750, or 4.6% of covered pay.

Under FAS 87, an important measure of funded position is a comparison of the fair value of assets to the accumulated benefit obligation (ABO). The ABO is the present value of accumulated benefits based on service and pay as of the measurement date.

The plan's ABO funded percentage is 83.6% as of January 1, 2005, based on the fair value of assets of \$2,395,158,061 and an ABO of \$2,865,596,559. AEP's balance sheet must reflect a minimum liability equal to the unfunded ABO for each pension plan with a funded percentage (fair value of assets divided by ABO) under 100%. To the extent that the minimum liability exceeds the accrued pension cost, an additional liability is recorded together with an offsetting intangible asset and/or a reduction in shareholders' equity (accumulated other comprehensive income).

Disclosures at fiscal year-end are prepared before the corresponding valuation results are available. Therefore, the December 31, 2004, additional minimum liability was derived from the January 1, 2004, valuation results. The December 31, 2005, disclosures will be developed based on the results of the January 1, 2005, valuation, rolled forward to the end of the year and adjusted for the year-end discount rate and asset values, as well as significant changes in plan provisions and participant population.

#### **Change in Pension Cost and Funded Position**

The pension cost increased from \$16,123,936 in fiscal 2004 to \$48,522,750 in fiscal 2005 because:

- Expected changes, based on prior year's assumptions, methods, plan provisions and contributions, increased the pension cost \$8,979,519.
- Noninvestment experience increased the pension cost \$2,842,478. The primary source of this change was better inactive data provided for the valuation.
- The return on the fair value of plan assets was 12.9% in fiscal 2004, which decreased the pension cost \$2,407,443.
- Assumption changes increased the pension cost \$22,984,260.

The ABO funded percentage decreased from 89.1% to 83.6% primarily due to a lower discount rate increasing the ABO. This was offset somewhat by better than expected asset returns.



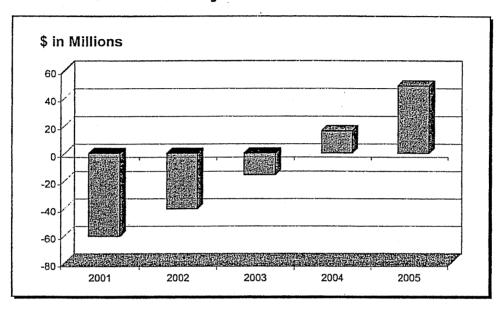
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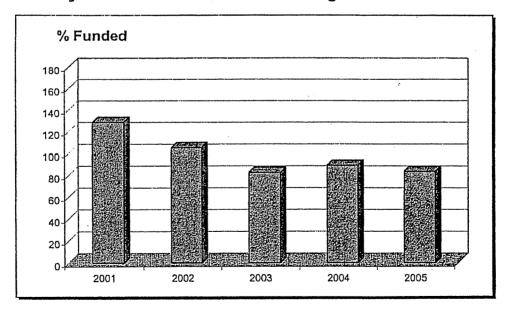
#### **History of Pension Cost and Funded Position**

The following charts show the history of the plan's pension cost and ABO funded position:

#### **History of Pension Cost**



**History of the Accumulated Benefit Obligation Funded Status** 



#### **History of Pension Cost and ABO Funded Percentage**

	_								
-	Рe	nsion	cost -	-	-	 _	-	-	

Fiscal year	Amount	Percent of covered pay	ABO funded percentage	Discount rate
2005	\$ 48,522,750	4.6%	83.6%	5.50%
2004	16,123,936	1.5	89.1	6.25
2003	(15,794,829)	(1.4)	82.7	6.75
2002	(40,513,046)	(4.0)	105.3	7.25
2001	(60,470,982).	(6.1)	128.6	7.50

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#### **Employer Contributions and ERISA Funded Position**

AEP's funding policy is to contribute an amount equal to the net pension cost each year under FAS 87. For 2005, there is no minimum required contribution. The maximum deductible contribution under the Internal Revenue Code is \$862,646,399, or 81.5% of covered pay. AEP intends to fund an amount equal to the expected unfunded ABO by the end of 2005 to eliminate the reduction in shareholders' equity.

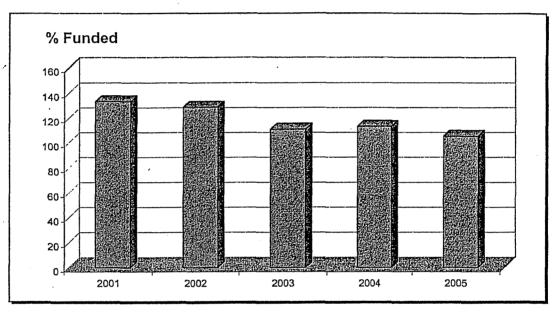
The funded position, on a contribution basis, is measured by comparing the actuarial value of assets with the actuarial accrued liability (AAL). The actuarial value of assets is a smoothed value that recognizes investment gains and losses over time. The AAL is the funding target, under ERISA, on which the employer contribution limits are based. As the funded percentage for a plan approaches or exceeds 100%, contributions to the plan may be restricted.

The plan's funded percentage (actuarial value of assets divided by AAL) is 105.3% as of January 1, 2005. This percentage is based on an actuarial value of assets of \$2,412,147,355 and an AAL of \$2,290,303,649.

#### **History of Employer Contributions and Funded Position**

The following charts show the history of employer contributions and the funding range for 2005, as well as AAL funded position.

#### History of Actuarial Accrued Liability (AAL) Funded Position



# History of Employer Contributions and AAL Funded Percentage and Current Year's Funding Range

---- Employer contributions ---

Plan year 2005:	Amount	Percent of covered pay	AAL funded percentage	Discount rate
► Minimum	\$ O	0.0%	105.3%	8.50%
► Maximum	862,646,399	81.5		
2004	16,123,936	1.5	113.2	8.50
2003	53,293,130	4.8	110.9	8,50
2002	0	0.0	128.6	8.50
2001	0 .	0.0	133.4	8.50





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#### **Current Liability**

An alternative measure of funded position compares the actuarial value of assets with the plan's current liability. The current liability is the present value of benefits accrued to the valuation date reflecting IRS restrictions on interest and mortality assumptions.

If the current liability funded percentage is below 100%, quarterly contributions may be required in the following plan year. The plan's current liability funded percentage is 90.7% as of January 1, 2005. This percentage is based on an actuarial value of assets of \$2,412,147,355 and a current liability of \$2,659,093,161.

If the current liability funded percentage using the highest allowable interest rate is below 90%, additional funding requirements, as well as employee notification requirements, may be triggered. As a result of the Pension Funding Equity Act, the highest allowable current liability interest rate was increased for the 2004 and 2005 plan years. The highest allowable current liability interest rate for 2005 is 6.10%. The plan's current liability funded percentage on this basis is 90.7% as of January 1, 2005.

AEP East Retirement Plan, March 2005

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#### **Actuarial Certification**

American Electric Power retained Towers Perrin to perform a valuation of its pension plan for the purpose of determining (1) its pension cost in accordance with FAS 87 and (2) the minimum required and maximum tax-deductible contributions in accordance with ERISA and allowed by the Internal Revenue Code. This valuation has been conducted in accordance with generally accepted actuarial principles and practices.

The consulting actuaries are members of the Society of Actuaries and other professional actuarial organizations and meet their "General Qualification Standard for Prescribed Statements of Actuarial Opinions" relating to pension plans.

In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants, and plan assets. While the scope of our engagement did not call for us to perform an audit or independent verification of this information, we have reviewed this information for reasonableness but have not audited it. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The actuarial assumptions and the accounting policies and methods employed in the development of the pension cost have been selected by the plan sponsor, with the concurrence of Towers Perrin. FAS 87 requires that each significant assumption "individually represent the best estimate of a particular future event."

The actuarial assumptions and methods employed in the development of the contribution limits have been selected by Towers Perrin, with the concurrence of the plan sponsor. The Internal Revenue Code requires the use of assumptions "each of which is reasonable (taking into account the experience of the plan and reasonable expectations)" and "which, in combination, offer the actuary's best estimate of anticipated experience under the plan."

The results shown in this report are reasonable actuarial results. However, a different set of results could also be considered reasonable actuarial results, since the Actuarial Standards of Practice describe a "best-estimate range" for each assumption, rather than a single best-estimate value. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for various assumptions.

The information contained in this report was prepared for the internal use of American Electric Power and its auditors in connection with our actuarial valuation of the pension plan. It is not intended nor necessarily suitable for other purposes. Further distribution to, or use by, other parties of all or part of this report is expressly prohibited without Towers Perrin's prior written consent.

Michael J. Turk, ASA, EA, MAAA

Joseph A. Perko, FSA, EA, MAAA

Towers Perrin

March 2005



# Supplemental Information

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#### **Asset Values**

# Asset Values for Calculating Pension Cost

Fair value,	excluding
contribution	ns receivable

٠	As of January 1, 2004	\$ 2,277,129,710
<b>&gt;</b>	Contributions	16,123,936
<b>&gt;</b>	Disbursements	(180,661,201)
<b>.</b>	Investment return	282,565,616
<b>&gt;</b>	As of January 1, 2005	\$ 2,395,158,061
<b>&gt;</b>	Rate of return	12.9%
Ma	arket-related value:	
<b>&gt;</b>	As of January 1, 2004	\$ 2,527,767,287
<b>&gt;</b>	As of January 1, 2005	2,429,603,813
<b>&gt;</b>	Rate of return	2.7%

# Asset Values for Calculating Employer Contributions

## Market value, including contributions receivable

contributions receivable:	
► As of January 1, 2004	\$ 2,277,129,710
► Contributions	, 16,123,936
► Disbursements	(180,661,201)
► Investment return	282,565,616
► As of January 1, 2005	\$ 2,395,158,061
► Rate of return	12.9%
Actuarial value:	
► As of January 1, 2004	\$ 2,505,032,141
► As of January 1, 2005	2,412,147,355
► Rate of return	3.0%



for Schedule B of Form 5500

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Rate of return (assuming mid-year cash flow)

3.0%

## **Basic Results for Pension Cost**

	January 1, 2005	January 1, 2004
Service Cost	\$ 71,546,810	\$ 63,327,398
Obligations		
Accumulated benefit obligation [ABO]:		·
<ul> <li>Participants currently receiving benefits</li> </ul>	\$ 1,428,537,934	\$ 1,294,816,626
► Deferred inactive participants	137,334,882	134,603,068
► Active participants	1,299,723,743	1,127,567,126
Total ABO	\$ 2,865,596,559	\$ 2,556,986,820
Obligation due to future salary increases	98,675,183	53,317,026
Projected benefit obligation [PBO]	\$ 2,964,271,742	\$ 2,610,303,846
Assets		
Fair value [FV]	\$ 2,395,158,061	\$ 2,277,129,710
Unrecognized investment losses (gains)	34,445,752	250,637,577
Market-related value	\$ 2,429,603,813	\$ 2,527,767,287
Funded Position		
Unfunded PBO	\$ 569,113,681	\$ 333,174,136
Minimum liability [ABO – FV, minimum zero]	470,438,498	279,857,110
Key Economic Assumptions		
Discount rate	5.50%	6.25%
Rate of return on assets	8.75%	8.75%
Salary increase rate	Rates vary by age from 3.50% to 8.50%	Rates vary by age from 3.50% to 8.50%

Fiscal 2004	Fi	cr	al	20	04	
-------------	----	----	----	----	----	--

\$ 138,652,941

Development of Prepaid (Accrued)	
Pension Cost as of December 31,	
2004	
Prepaid (accrued) pension cost, as of December 31, 2003	

Change during fiscal 2004:

► Income (cost) recognized (16,123,936)

► Employer contributions 16,123,936

► Effect of curtailments, settlements,

and termination benefits 0

Prepaid (accrued) pension cost,
as of December 31, 2004 \$ 138,652,941

•	January 1, 2005	January 1, 2004
Reconciliation of Funded Status		
Funded status [FV – PBO]	\$ (569,113,681)	\$ (333,174,136)
Unrecognized net actuarial loss (gain)	679,543,817	439,652,312
Unrecognized prior service cost (credit)	28,222,805	32,174,765
Unrecognized transition obligation (asset)	0	0
Prepaid (accrued) pension cost	\$ 138,652,941	\$ 138,652,941
Balance Sheet Effects		,
Prepaid pension cost	\$ 138,652,941	\$ 138,652,941
Accrued pension cost	0	0
Additional minimum liability	(609,091,439)	(418,510,051)
Intangible asset	28,222,805	32,174,765
Accumulated other comprehensive income	580,868,634	386,335,286
Balance sheet effect	\$ 138,652,941	\$ 138,652,941

The additional minimum liability is equal to the minimum liability, adjusted for the prepaid (accrued) pension cost.



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## **Pension Cost**

	Fiscal 2005		Fiscal 2004		
Pension Cost	•				
Service cost	\$	71,546,8	10	\$	63,327,398
Interest cost		161,470,1	38		159,414,696
Expected return on assets		(216,072,4	07)		(210,570,118)
Amortization:					
<ul><li>Transition obligation (asset)</li></ul>			0		0
► Prior service cost (credit)		3,951,9	60		3,951,960
► Net loss (gain)	27,626,249			0	
Pension cost	\$	48,522,7	50	\$	16,123,936
Percent of covered pay		2	1.6%		. 1.5%
Per active participant	\$	3,2	41	\$	1,055
Change in Pension Cost					
Pension cost for fiscal 2004		\$	16,123,936		
Change from fiscal 2004 to fiscal 2005:	•				
<ul><li>Expected based on prior valuation</li></ul>			8,979,519		
<ul> <li>Loss (gain) from noninvestment experience</li> </ul>			2,842,478		
<ul><li>Loss (gain) from asset experience</li></ul>			(2,407,443)		
<ul><li>Assumption changes</li></ul>			22,984,260		
► Plan amendments		***	0		
Pension cost for fiscal 2005		\$	48,522,750		

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#### **Selected Financial Statement Disclosure Information**

The following information was included in AEP's 2004 pension disclosures. This information was developed by adjusting the prior year's valuation results for the passage of time and other significant changes.

	Fiscal 2004	Fiscal 2003
Change in Benefit Obligation		
PBO, beginning of year	\$ 2,554,102,543	\$2,476,865,924
Service cost	63,327,398	57,162,979
Interest cost	159,414,696	161,329,254
Plan amendments	0	0
Actuarial loss (gain)	<b>2</b> 93,406,328	59,906,159
Benefits paid	(180,661,201)	(201,161,773)
Effect of curtailments, settlements and termination benefits	0	0
PBO, end of year	\$ 2,889,589,764	\$2,554,102,543
Change in Plan Assets		
Fair value of plan assets, beginning of year	\$ 2,278,132,394	\$1,985,181,830
Actual return on plan assets	292,148,089	440,819,207
Employer contributions	16,123,936	53,293,130
Benefits paid	(180,661,201)	(201,161,773)
Settlements	0	0
Fair value of plan assets, end of year	\$ 2,405,743,218	\$2,278,132,394



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The following information was included in AEP's pension disclosures.

	December 31, 2004		December 31, 2003	
Reconciliation of Funded Status		,		
Funded status	\$	(483,846,546)	\$	(275,970,149)
Unrecognized net actuarial loss (gain)	•	594,276,682		382,448,325
Unrecognized prior service cost (credit)		28,222,805		32,174,765
Unrecognized transition obligation (asset)		0	Action 0.00 ( 0.	0
Prepaid (accrued) pension cost	\$	138,652,941	\$	138,652,941
Amount Recognized in Statement of Financial Position	:			
Prepaid pension cost	\$ .	138,652,941	\$	138,652,941
Accrued pension cost		0		0
Additional minimum liability		(532,597,301)		(371,473,827)
Intangible asset		28,222,805		32,174,765
Accumulated other comprehensive income		504,374,496	<del></del>	339,299,062
Net amount recognized	\$	138,652,941	\$	138,652,941

The accumulated other comprehensive income has not been tax effected. Any tax effect would have been separately recognized.

## Present Value of Accumulated Plan Benefits for FAS 35

•	January 1, 2005	January 1, 2004
Actuarial Present Value of Accumulated Plan Benefits	•	
Vested benefits:		
<ul> <li>Participants currently receiving benefits</li> </ul>	\$ 1,152,485,435	\$ 1,108,052,994
► Other participants	1,004,201,676	1,013,969,196
► Total vested benefits	\$ 2,156,687,111	\$ 2,122,022,190
Nonvested benefits	81,551,953	64,412,728
Total accumulated benefits	\$ 2,238,239,064	\$ 2,186,434,918
Market value of assets	2,395,158,061	2,277,129,710
Key Assumptions		
Interest rate	8.50%	8.50%
Mortality	GAM94	GAM83
Change in Actuarial Present Value of Accumulated Plan Benefits		
Actuarial present value of accumulated plan benefits as of January 1, 2004	\$ 2,186,4	134,918
Change from 2004 to 2005:		•
<ul> <li>Additional benefits accumulated (including the effect of noninvestment experience)</li> </ul>		156,096
► Interest due to decrease in the discount peri	od 178,3	325,440
► Benefits paid	(180,6	661,201)
► Assumption changes	(1,0	016,189)
► Plan amendments		0
Actuarial present value of accumulated plan benefits as of January 1, 2005	\$ 2,238,2	239,064





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## **Basic Results for Employer Contributions**

	January 1, 2005	January 1, 2004
Normal Cost and Liabilities	*	
Normal cost	\$ 51,495,684	\$ 52,179,549
Actuarial accrued liability [AAL]	2,290,303,649	2,212,339,296
Current liability [CL]:		
➤ Selected interest rate	2,659,093,161	2,515,292,360
► Highest allowable interest rate	2,659,093,161	2,434,389,548
Assets		
Market value	\$ 2,395,158,061	\$ 2,277,129,710
Unrecognized investment losses (gains)	16,989,294	227,902,431
Actuarial value [AV]	\$ 2,412,147,355	\$ 2,505,032,141
Funded Position		
Unfunded actuarial accrued liability [AAL – AV]	\$ (121,843,706)	\$ (292,692,845)
AAL funded percentage [AV ÷ AAL]	105.3%	113.2%
CL funded percentage:		
<ul> <li>Selected interest rate</li> </ul>	90.7%	99.6%
<ul> <li>Highest allowable interest rate</li> </ul>	90.7%	102.9%
Key Economic Assumptions		
Discount rate for normal cost and actuarial accrued liability	8.50%	8.50%
Current liability interest rate:		
► Selected	6.10%	6.29%
► Highest allowable	6.10%	6.55%
Salary increase rate	Rates vary by age from 3.50% to 8.50%	Rates vary by age from 3.50% to 8.50%

## **Minimum Required Employer Contribution**

	January 1, 2005	January 1, 2004
Minimum Required Employer Contribution	•	
Normal cost	\$ 51,495,684	\$ 52,179,549
Amortization amounts	0	0
Interest adjustments	4,377,133	4,435,262
Additional funding charge	0	0
Credit balance with interest	(18,077,650)	(12,926)
Minimum required contribution before full funding limit	\$ 37,795,167	\$ 56,601,885
Minimum required contribution after full funding limit	0	0
Percent of covered pay	0.0%	0.0%
Per active participant	. \$ 0	\$ 0

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### **Maximum Deductible Employer Contribution**

	Januar	y 1, 2005	Janua	ry 1, 2004
Maximum Deductible Employer Contribution	•			
Maximum deductible contribution before adjustments	· <b>\$</b>	55,872,817	\$	56,614,811
Allowable deduction, the greatest of:				
<ul> <li>Maximum deductible contribution after full funding limit</li> </ul>		55,872,817		0
<ul> <li>Contribution necessary to satisfy minimum funding standards</li> </ul>		0		0
<ul> <li>Contribution necessary to fund 100% of current liability</li> </ul>	8	62,646,399		24,654,406
Maximum deductible contribution	\$ 8	62,646,399*	\$	24,654,406
Percent of covered pay		81.5%		2.2%
Per active participant	\$	57,617	\$	1,614

The above amount represents the maximum deductible contribution for this plan. Deductibility of contributions to a defined contribution plan maintained for the same employees may be affected by the 25% of pay limitation for defined benefit and defined contribution plans combined.

#### Changes in Maximum Deductible Employer Contribution

	eximum required contribution as of nuary 1, 2004	\$ 24,654,406
Ch	anges from 2004 to 2005:	
>	Expected based on prior valuation	2,306,304
<b>&gt;</b>	Loss (gain) from noninvestment experience	15,338,145
٠	Loss (gain) from asset experience	145,691,949
•	Change in assumptions	 674,655,595
	aximum deductible contribution as of nuary 1, 2005	\$ 862,646,399

<sup>\*</sup>Based on lowest permissible current liability rate of 4.59%.

## **Actuarial Assumptions and Methods**

		Pe	nsion Cost	Contributions
Ec	conomic Assumptions		•	
<b>&gt;</b>	Discount rate		5.50%	8.50%
<b>&gt;</b>	Return on assets	-	8.50%	N/A
۲	Current liability		N/A	6.10%
<b>&gt;</b>	FAS 35		N/A	8.50%
An	nual rates of increase in:			
		Rates	varying by age	
<b>&gt;</b>	Salaries	Age	Rate	Rate
		20 30 40 50 60	8.50% 6.00% 4.50% 3.50% 3.50%	8.50% 6.00% 4.50% 3.50% 3.50%
<b>,</b>	Cash balance crediting rate and lump sum interest rate		5.50%	5.75%
۲	Future Social Security wage bases		4.00%	4.00%
<b>&gt;</b>	Indexed limits on compensation and benefits		3.00%	N/A
De	emographic Assumptions			
Mo	ortality	1994 G	Froup Annuity Mortalit	y Table (male and female)
			Group Annuity Mortalit purposes	y (male and female) for current
Τe	rmination	Rates	varying by age	
			Age 20 30 40 50 60	Rate 10.4% 5.9% 2.7% 0.9% 0.9%



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-				
к	eti	re	me	nt

Rates varying by age; average retirement age 61

4 ~ ~	Dete
Age	Rate
55	10%
56-59	7%
60-61	16%
62	40%
63	20%
64	44%
65	84%
66-69	50%
70+	100%

Form of payment

75% lump sum; 25% annuity

Percent married

80% of male participants; 70% of female participants

Spouse ages

Wives are assumed to be three years younger than husbands

Valuation pay

2005 Base Salary Pay (Grandfathered) – estimated as the sum of the following updated one year according to the salary increase assumption:

- (i) 2004 base salary for the period January 1, 2004, to November 30, 2004
- (ii) The monthly base rate of pay on December 1, 2004.

2005 Expanded Pay (Cash Balance) – sum of the following updated one year according to the salary increase assumption:

- (i) 2004 base salary for the period January 1, 2004, to November 30, 2004
- (ii) The monthly base rate of pay on December 1, 2004
- (iii) Average incentive paid for 2004, 2003 and 2002, including deferred amounts

#### **Actuarial Methods**

### Pension cost:

Service cost and projected Projected unit credit benefit obligation

Market-related value of assets

The market value on the valuation date less the following percentages of prior years' investment gains and losses:

- 80% of the prior year
- 60% of the second prior year
- 40% of the third prior year
- 20% of the fourth prior year.

The investment gain or loss is calculated each year by:

- Rolling forward the prior years' fair value of assets with actual contributions, benefit payments, and expected return on investments using the long term yield assumption.
- Comparing the actual fair value of assets to the expected value calculated above.

#### Contributions:

Normal cost and actuarial accrued liability

Projected unit credit

Actuarial value of assets

Same technique as above in market-related value, except the valuation interest rate is used to compute the expected market value. The actuarial value of assets must be within 20% of the fair value, plus contributions receivable.

Benefits not valued

All benefits were valued except:

- Any liabilities that may be reinstated in the event of reemployment.
- Preretirement death benefits for terminated vested participants.
- The alternate benefit formula for Members who did not elect to withdraw their contributions.
- Any liabilities relating to Member's unwithdrawn contributions.
- Liabilities related to special benefits as a result of termination due to restructuring or downsizing.



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# **Change in Assumptions and Methods Since Prior Valuation**

Pension cost

Discount rate for benefit obligations changed from 6.25% to

5.50%.

Contributions

Current liability interest rate changed from 6.29% to 6.10%.

The mortality table was changed from the 1983 Group Annuity Mortality Table to the 1994 Group Mortality Table to value all liabilities except for current liability purposes.

The lump sum election percentage was changed from 100% electing lump sums to 75% electing lump sums and 25% electing life annuities to better reflect actual experience.

#### **Data Sources**

Towers Perrin used participant data as of December 1, 2004, and accrued pension costs as of December 31, 2004, supplied by AEP. Data were reviewed for reasonableness and consistency, but no audit was performed. Assumptions or estimates were made by the Towers Perrin actuaries when data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

# **Participant Data**

	January 1, 2005	January 1, 2004
Active		
Number	14,972	15,280
Average age	46.8	46.2
Average past service	18.5	18.1
Average future service	12.6	12.9
Covered pay:		
► Total	\$ 1,092,042,708	\$ 1,104,348,759
► Average	72,939	72,274
Deferred Inactive		
Number	3,656	4,328
Average age	49.2	49.6
Annual benefits:		
► Total	\$ 27,601,809	\$ 29,278,060
► Average	7,550	6,765
<b>Currently Receiving Benefits</b>		
Number	11,315	10,931
Average age	71.9	, 71 <b>.</b> 5
Annual benefits:		
► Total	\$ 143,598,397	\$ 140,505,207
► Average	12,691	12,854
Total Participants Included in Valuation		
Number	29,943	30,539



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# **Analysis of Inactive Participant Data**

# **Deferred Inactive**

Age nearest birthday	Number	Annual benefit	Average annual benefit
< 40	242	\$ 1,198,142	\$ 4,951
40 – 49	1,649	10,955,956	6,644
50 – 54	995	8,688,340	8,732
55 <b>–</b> 59 <sub>,</sub>	567	5,207,328	9,184
60 – 64	187	1,439,339	7,697
> 64	16	112,704	7,044
Total	3,656	\$ 27,601,809	\$ 7,550

# **Currently Receiving Benefits**

Age nearest birthday	Number	Annual benefit	Average annual benefit
< 55	144	\$ 740,160	\$ 5,140
55 – 59	910	13,125,840	14,424
60 – 64	1,759	29,157,184	16,576
65 – 69	1,942	26,117,958	13,449
70 – 74 .	1,975	26,510,425	13,423
75 – 79	2,035	25,636,930	12,598
80 – 84	1,450	14,572,500	, 10,050
> 84	1,100	7,737,400	7,034
Total	11,315	\$ 143,598,397	\$ 12,691

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#### Active Participant Data by Age and Service AEP East Retirement Plan 2005 Projected Pay

Age						Con	npleted Ye	ars of Servi	ce					
Nearest														
Birthday		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
0-24	Number		78	78	45	7	1							209
	Avg Pay	,	34,539	36,800	38,632	41,128	60,532							36,609
	Avg CB		1,323	2,275	3,028	13,335	8,130							2,480
25-29	Number		105	143	188	53	98	2						589
	Avg Pay		41,653	47,821	51,652	64,053	57,748	58,034						51,091
	Avg CB		1,750	3,380	5,281	8,857	10,451	5,900						5,374
30-34	Number		. 97	124	220	79	303	76	3					902
	Avg Pay		51,551	62,587	63,493	72,262	67,993	68,822	68,881					64,831
	Avg CB		2,545	5,007	7,040	10,126	13,691	20,291	22,800					9,950
35-39	Number		61	97	202	73	276	396	230	5				1,340
	Avg Pay		59,684	66,098	62,521	75,921	72,595	74,964	73,533	77,099				71,078
	Avg CB		3,383	5,863	7,714	12,506	17,587	29,185	38,671	46,533				21,481
40-44	Number		73	73	197	64	250	342	739	494	58			2,290
	Avg Pay		62,341	75,136	70,821	83,487	75,619	71,316	77,764	74,797	67,845			74,663
	Avg CB		4,026	7,770	11,096	17,308	21,932	34,923	51,636	64,657	69,401			41,793
45-49	Number		59	59	175	61	198	254	532	899	1,080	29		3,346
	Avg Pay		59,874	68,138	70,112	83,266	74,450	73,620	73,785	81,502	76,422	71,315		76,351
	Avg CB		3,970	8,029	13,326	20,074	25,735	44,735	61,772	88,809	99,064	113,450		72,834
50-54	Number		30	35	141	37	141	166	357	520	957	624	49	3,057
	Avg Pay		60,926	70,041	71,768	87,490	75,456	71,485	72,212	78,520	78,602	77,722	69,534	76,506
	Avg CB		4,625	9,301	15,895	23,099	31,551	54,561	75,639	110,176	131,761	155,496	164,245	108,778
55-59	Number		19	27	85	38	103	84	216	283	413	719	500	2,487
	Avg Pay		55,911	66,367	68,079	88,459	70,384	62,469	65,916	73,118	75,066	81,571	79,977	76,023
	Avg CB		4,602	9,487	16,747	26,755	38,088	59,126	91,600	131,816	160,632	208,817	233,761	161,690
60-64	Number		5	11	44	16	35	42	57	81	90	103	195	679
	Avg Pay		74,267	65,539	60,092	80,095	60,561	58,697	65,775	71,371	66,279	71,635	72,631	68,689
	Avg CB		6,866	12,048	16,072	26,951	40,699	67,509	112,975	169,358	184,567	239,406	265,420	174,889
65-69	Number		3	2	14	1	9	4	8	8	7	4	4	64
	Avg Pay		66,134	81,327	60,176	87,330	51,288	50,368	68,406	63,001	76,519	79,204	55,243	63,728
	Avg CB		5,529	14,928	15,778	30,736	33,742	79,450	141,165	150,025	280,758	366,916	310,449	123,810
Over 69	Number			2	2		1	3		1				. 9
	Avg Pay			79,138	63,185		39,245	28,863		48,598				51,009
	Avg CB			17,017	17,345		28,855	39,131		113,953				36,547
Total	Number		530	651	1,313	429	1,415	1,369	2,142	2,291	2,605	1,479	748	14,972
	Avg Pay		51,419	59,403	63,813	77,677	71,034	71,577	73,835	77,897	76,467	79,048	77,245	72,939
	Avg CB		2,916	5,636	10,192	16,180	21,726	39,234	62,718	96,744	123,619	187,008	237,871	82,989

Average Age = 46.8

Average Service = 18.5



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# **Reconciliation of Participant Data**

	Active	Deferred inactive	Currently receiving benefits	Total
Included in January 1, 2004, valuation	15,280	4,328	10,931	30,539
Change due to:				
<ul><li>New hire and rehire</li></ul>	608	(21)	0	587
<ul><li>Nonvested termination</li></ul>	(284)	0	. 0	(284)
<ul> <li>Vested termination</li> </ul>	(130)	130	0	0
► Retirement	(210)	(179)	389	0
► Disability	0	0	0	0
<ul><li>Death without beneficiary</li></ul>	(8)	(25)	(310)	(343)
<ul><li>Death with beneficiary</li></ul>	(7)	2	5	0
► Cashout	(277)	(181)	. (1)	(459)
<ul><li>Miscellaneous</li></ul>	0	<u>(398</u> )*	<u>301</u> *	<u>(97)</u>
Net change	(308)	(672)	384	(596)
Included in January 1, 2005, valuation	14,972	3,656	11,315	29,943

<sup>\*</sup> Majority of miscellaneous changes due to deferred inactive clean-up initiative in 2004.

# **Plan Provisions**

**Effective Date** 

May 1, 1955. Restated effective January 1, 2001.

**Recent Amendments** 

Effective as of October 1, 2004.

**Covered Employees** 

Employees become Members of the Plan on the first day of the month following completion of one year of service.

**Participation Date** 

Date of becoming a covered employee.

**Definitions** 

Grandfathered Employee

If on December 31, 2000, either:

- Participate in AEP System Retirement Plan, or
- In one-year waiting period for AEP System Retirement Plan participation.

Vesting Service

A period of time from employment date to termination date and, in general, includes periods of severance that are not in excess of 12 months.

Accredited Service

Elapsed time from date of hire (from benefit service start date).

Final Average Pay

Average of the highest 36-consecutive months of base pay out of the last 120 months of employment, subject to IRS limits.

Cash Balance Pay

Pay received during the year, including base pay, overtime, shift differential/Sunday premium pay and incentive pay, subject to IRS limits.

Covered Compensation Amount The average of the Social Security taxable wage base during the 35-year period including the year in which the participant retires, dies, becomes disabled or otherwise terminates employment. This monthly average is calculated to the next lower or equal whole dollar amount and is then rounded to nearest \$50.

Normal Retirement Date (NRD)

The first day of the calendar month whose first day is nearest the later of the Member's 65<sup>th</sup> birthday or the completion of five years of Vesting Service.



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Cash Balance Account

Recordkeeping account to which annual interest credits and annual compensation credits is credited. The cash balance account is updated at the end of each plan year and is equal to:

Cash Balance Account as of the End of the Prior Plan Year

Interest Credits

**Company Credits** 

Cash Balance Benefit

Cash Balance Account converted to a monthly annuity.

Opening Balance

For those participating or eligible for the AEP System Retirement Plan on December 31, 2000, opening balance is calculated as follows:

- Present value of monthly normal retirement benefit determined as of December 31, 2000, and payable at age 65 (or current age if older)
  - Present value determined based on 5.78% interest and IRS regulated mortality (GAM83 Unisex) data for lump sums (postretirement only)

#### Plus

 Credit for early retirement subsidy for monthly payments beginning at age 62 (or current age if older)

#### Plus

- Transition credit based on age, service and pay received in 2000 (see "Company Credits" for credit percentages)
  - Age and service based on completed whole years as of December 31, 2000.

For employees hired on or after January 1, 2001, opening balance is \$0.

Interest Credits

Interest credits are applied to beginning of year account balance on December 31 each year.

Based on the average 30-year Treasury Bond rate for November of the previous year.

Minimum of 4%.

# **Company Credits**

Applied to account balance on December 31 or termination date if earlier.

Amount is a percentage of eligible pay received during the year, based on age plus years of Vesting Service (age and service in completed whole years as of December 31).

Age Plus	Annual				
Years of Service	Company Credit				
Less than 30	3.0%				
30 – 39	3.5%				
40 – 49	4.5%				
50 59	5.5%				
60 – 69	7.0%				
70+	8.5%				

# Monthly Grandfathered Benefit

Sum of (i)+(ii)+(iii):

- (i) 1.1% of Final Average Pay x Accredited Service up to 35 years
- (ii) 0.5% of Final Average Pay Less Covered Compensation x Accredited Service up to 35 years
- (iii) 1.33% of Final Average Pay x Accredited Service between 35 and 45 years.

Service continues to accrue and Final Average Pay grows through December 31, 2010.

Long-term Disability and Paid Leaves

Compensation equal to base rate of pay as of disability date. Vesting service continues.

Unpaid Leave

No compensation for annual compensation credit. Vesting service continues.

# **Eligibility for Benefits**

Normal Retirement

All Members at or after their Normal Retirement Date.



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Vested

All Members who terminate employment after completion of five years of Vesting Service, or upon death.

Early Retirement

Any time after attainment of age 55 and completion of five years of vesting.

Disability

All Members who are unable to work at own occupation solely because of sickness or injury for the first 24 months of disability. After 24 months of disability, the participant is eligible if unable to work at any gainful occupation for which the participant may be able, or may reasonably become qualified by education, training or experience, to perform.

Surviving Spouse

The surviving spouse of a Grandfathered Member who retired or is eligible to retire on Normal or Early Retirement and who was married to that spouse for the year preceding commencement and whose grandfathered benefit exceeds his or her Cash Balance Benefit.

Preretirement Death

Beneficiary of deceased Member.

# Monthly Benefits Paid Upon the Following Events

Normal Retirement

For Grandfathered Employees, the better of the monthly grandfathered benefit or the Cash Balance Benefit determined as of Normal Retirement Date. For all other employees, the Cash Balance Benefit determined as of Normal Retirement Date.

Early Retirement

For Grandfathered Employees, the better of:

- (1)The monthly grandfathered retirement benefit reduced by 3% per year for each year commencement precedes age 62, and
- (2)The Cash Balance Benefit determined as of the Early Retirement Date.

For all other employees, the Cash Balance Benefit determined as of the Early Retirement Date.

#### Deferred Vested Retirement

The accrued Normal Retirement Benefit (better of Cash Balance and Grandfathered Benefits, if eligible), payable at Normal Retirement Date or actuarially reduced and payable at any age.

## Disability

The greater of (1) or (2):

- (1) Accrued Grandfathered Retirement Benefit reduced as in the Early Retirement Benefit. If retirement occurs prior to age 55, the benefit is further reduced actuarially from age 55. The Disability Retirement Benefit will reflect Accredited Service that accrued (at most recent rate of base earnings) to a Member while receiving benefits under the Company's LTD plan.
- (2) The Cash Balance Benefit with continued Company Credits while disabled.

Benefit (1) applies for Grandfathered Employees only.

#### Preretirement Death

Better of (1) or (2):

- (1) The grandfathered monthly benefit as if the employee commenced a 60% qualified joint and survivor benefit at his earliest retirement date
- (2) Annuity equivalent of Cash Balance account, or the cash balance account.

Benefit (1) applies for Grandfathered Employees whose beneficiary is his or her spouse.

# Surviving Spouse Benefits

A benefit payable for life equal to 30% of the single life annuity payable to the grandfathered Member. The spouse's benefit is actuarially reduced for each year by which the spouse is more than 10 years younger than the Member. Payable to Grandfathered Employees only.



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## Form of Payment

Grandfathered Employees

The following are available for Grandfathered Employees for both the Grandfathered Benefit and the Cash Balance Benefit.

- Full lump sum payment.
- Combination of partial lump sum (25%, 50% or 75% of full lump sum) with remainder paid as a monthly benefit (see below).
- Monthly payment:
  - Single life annuity.
  - Optional joint annuities (spouse or other beneficiary).
    - Available in 40%, 50%, 60%, 75%, 100%.
    - Can elect pop-up and/or level income options.
  - Automatic company-paid 30% surviving spouse annuity included in Grandfathered Benefit annuity if terminate on or after age 55 and married at least one year. Cash Balance Benefit is actuarially reduced for this feature.
- Employees Hired On or After January 1, 2001

The following are available for those hired on or after January 1, 2001:

- Full lump sum payment.
- Combination of partial lump sum (25%, 50% or 75% of full lump sum) with remainder paid as a monthly benefit (see below).
- Monthly payment:
  - Single life annuity.
  - Joint annuities (spouse or other beneficiary).
    - Available in 50%, 75%, 100%.

Member Contributions

Prior to January 1, 1978, employee contributions were required as a condition of Membership. In May and June of 1981, Members were permitted an election to withdraw those contributions. Those who did not elect to withdraw have retirement benefits based on a formula that differs from the one appearing in this table. However, the number of nonelecting Members is so small that special plan provisions for that group have not been included in this summary.

#### **Benefits Not Valued**

A small portion of the population made employee contributions to the plan. Because the amount of these contributions is not material to the plan, they are not part of the valuation.

Participants who were employees of Columbus Southern Power (CSP) at the time AEP acquired that company have a frozen benefit under the CSP benefit formula at December 31, 1986. Benefits for these participants are the greater of an all-service AEP benefit and a two-part benefit consisting of the frozen CSP benefit plus an AEP benefit accrued from January 1, 1987. Because this applies to a small portion of the population and the CSP frozen benefit is not often the greater benefit for these participants, this benefit is not valued.

# **Future Plan Changes**

No future plan changes were recognized in determining pension cost. Towers Perrin is not aware of any future plan changes that are required to be reflected.

# **Changes in Benefits Valued Since Prior Year**

Other than changes in the IRS pay cap and 415 limits, there have been no other changes in benefits valued since the prior year. The plan change effective October 1, 2004, incorporated the 417(e) rates for the lump sum and level income options; it did not affect the benefits valued.



	Retirees										
	Vasted	Non-Vested	Total	Receiving		Deferred	Total	Total			
Location	Actives	Actives	Actives:	Benefits	Beneficiaries	Vesteds	Inactives	Participants			
	3	1		2							
AEP Energy Services, Inc.	0	0	0	0		39	41	45			
AEP Pro Serv, Inc.	0	Ů		0	0	2	2	2			
AEP T & D Services, LLC			0		0	0	0	0			
American Electric Power Service Corporation	3,830	1,090	4,920	1,421	301	1,398	3,120	8,040			
Appalachian Power Co - Distribution	1,188	51	1,239	1,277	430	314	2,021	3,260			
Appalachian Power Co - Generation	1,061	22	1,083	610	200	100	910	1,993			
Appalachian Power Co - Transmission	193	0	193	75	5	30	110	303			
C3 Communications, Inc.	0	0	0	0	0	1	1	1			
Cardinal Operating Company	250	Q	250	140	40	26	206	456			
AEP Texas Central Company - Distribution	7	85	92	2	1	0	3	95			
AEP Texas Central Company - Generation	0	0	0	0	0	0	0	0			
AEP Texas Central Company - Nuclear	0	6	e	0	. 0	0	0	0			
AEP Texas Central Company - Transmission	2	8	10	0	0	. 0	Ó	10			
Columbus Southern Power Co - Distribution	572	120	692	1,043	98 '	166	1,307	1,999			
Columbus Southern Power Co - Generation	329	8	337	389	32	91	512	849			
Columbus Southern Power Co - Transmission	43	6	49	85	10	14	109	158			
Conesville Coal Preparation Company	12	1	13	4	1	Ö	5	18			
Cook Coal Terminal	10	á	10	10	ò	ŏ	10	20			
CSW Energy, Inc.	0	9	9	0	Ō	0	Ö	g			
Elmwood	70	5.2	122	1	0	0	1	123			
EnerShop Inc.	0	0	0	0	0	a	G	0			
Indiana Michigan Power Co - Distribution	543	78	621	773	258	200	1,231	1,852			
Indiana Michigan Power Co - Generation	421	σ	421	277	82	181	540	961			
Indiana Michigan Power Co - Nuclear	872	216	1,088	247	44	314	605	1,693			
Indiana Michigan Power Co - Transmission	140	7	147	79	9	22	110	257			
Kentucky Power Co - Distribution	247	· 5	252	187	72	83	342	594			
Kentucky Power Co - Generation	138	0	138	70	18	19	107	245			
Kentucky Power Co - Transmission	51	0	51	4	0	5	9	60			
Kingsport Power Co - Distribution	49	2	51	46	15	18	79	130			
Kingsport Power Co - Transmission	10	Ó	10	4	1	Ö	5	15			
Memco	188	150	338	1	ó	1	2	340			
Ohio Power Co - Distribution	811	92	903	977	314	209	1,500	2,403			
Ohio Power Co - Generation	808	1	809	604	188	175	967	1,776			
Ohlo Power Co - Transmission	191	6	197	105	36	28	167	364			
Public Service Co of Oklahoma - Distribution	17	78	95	100	1	0	107	96			
Public Service Co of Oklahoma - Generation	2	29	31	ő	Ġ	ŏ	Ö	31			
Public Service Co of Oklahoma - Transmission	ō	3	3	1	Ö	ő	1				
Southwestern Electric Power Co - Distribution	5	67	. 72	ò	0	0	0	_4			
	5	18	23	ŭ	ő	0		72			
Southwestern Electric Power Co - Generation	1	12	13	13			0	23			
Southwestern Electric Power Co - Texas - Distribution	ó	0	13	0	0	1	14	27			
Southwestern Electric Power Co - Texas - Transmissic			6	ů Q	0	0	0	ō			
Southwestern Electric Power Co - Transmission	2	4	338		0	0	0	6			
Water Transportation (Blackhawk)	226	112		110	37	26	173	511			
AEP Texas North Company - Distribution	2	25		. 0	0	0	0	27			
AEP Texas North Company - Generation	1	1	2	0	0	0	0	2			
AEP Texas North Company - Transmission	0	4	4	0	0	0	0	4			
Wheeling Power Co - Distribution	57	5	62	69	31	12	112	174			
Wheeling Power Co - Transmission	0	0	Q	8	7	1	16	16			
Cedar Coal Co	3	0	3.	88	35	7	130	133			
Central Coal Company	0	0	0	0	. 0	٥	0	0			
Central Ohio Coal	٥	0	0	68	14	40	122	122			
Southern Ohio Coal - Martinka	0	0	0	62	13	75	150	150			
Southern Ohio Coal - Meigs	2	0	2	83	29	23	135	137			
Windsor	0	0	0	33	7	18	58	58			
Price River Coal	0	0	0	15	2	6	23	23			
Houston Pipeline (HPL)	146	96	242	1	Ó	13	14	256			
• • •											
Total	12,508	2,464	14,972	8,984	2,331	3,656	14,971	29,943			



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