American Wafer Works Company, Inc. Pension Plan

Actuarial Valuation Report

Pension Cost for Fiscal Year Ending December 31,2003

Employer Contributions for Plan Year Beginning July 1, 2002

November 2003

Towers Perrin

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Management Summary of Valuation Results

Financial Results

This report summarizes financial results for the American Water Works Company, Inc. Pension Plan based on actuarial valuations as of January 1,2003 and January 1,2002 for determination of pension cost and valuations as of July 1,2002 and July 1,2001 for determination of contributions.

	January 1, 2003	January 9,2002
FAS 87 Pension Cost		
Amount	$ 32,628,436	$ 17,369,508
FAS 87 Funded Position		
Accumulated benefit obligation [ABO]	$ 333,173,499	$ 270,079,382
Fair value of assets [FV]	270,546,409	286,100,020
ABO funded percentage [FV ÷ ABO]	81.2%	105.9%
Prepaid (accrued) pension cost	$ (49,786,046)	$ (39,395,285)
	July 1,2002	**July 1, 2001**
Employer Contributions		
Minimum required	$ 12,432,374	$ 0
Maximum deductible	$ 12,432,374	$ 0
ERISA Funded Position		
Actuarial accrued liability [AAL]	$ 288,890,229*	$ 265,802,556
Actuarial value of assets [AV]	315,635,049"	319,920,187
AAL funded percentage [AV ÷ AAL]	109.3%	120.4%
Current liability funded percentage	107.0%	104.9%

* Values are as of July 1,2002 and therefore do not *reflect* the merger of the Northwest Indiana plan effective January 1, 2003

Highlights

Economic Assumptions

The discount rate for pension cost purposes is a rate at which pension obligations can be settled. This rate is based on high-quality corporate bond yields. The following bond yields were considered in the selection of the economic assumptions:

	December 31, 2002	December 31, 2004
30-year Treasury	4.76%	5.48%
Moody's Aaa	6.09%	6.61%
Moody's Aa	6.52%	7.08%

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, 2002	December 31, 2001
Discount rate	6.75%	7.25%
Rate of return on assets	8.75%	9.00%
Salary increase rate	Age-graded scale averaging 4.75%	Age-graded scale averaging 4.75%

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 Job Creation and Worker Assistance Act of 2002 increased the high end of the permissible range of the current liability interest rate for the 2002 and 2003 plan years, from 105% to 120% of the four-year weighted average of 30-year U.S. Treasury bond yields. That range and assumptions for contribution purposes are:

	July 9, 2002	July /, 2001
Discount rate for normal cost and actuarial accrued liability	9.00%	9.00%
Current liability interest rate:		
▸ Permissible range	5.10% to 6.80%	5.22% to 6.09%
▸ Selected rate	6.80%	6.09%
Salary increase rate	Age-graded scale averaging 5.00%	Age-graded scale averaging 5.00%

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 demographic assumptions have not changed since the prior valuation.

American Water Works Company, Inc. had 4,176 active participants covered under this pension plan as of July 1,2002 versus 3,916 for the prior year. Covered payroll increased 13% from the prior year.

The average compensation increase for the participants who remained active since July 1,2002 was about 4.2%.

Assets

In fiscal 2002, the fund recorded a (7.6)% investment return (net of expenses), while the capital markets performed as follows:

Large equities [S&P 500]	(22.10)%
Intermediate/small equities [Russell 2500]	(17.80)%
Non-U.S. equities [EAFE]	(15.66)%
Bonds [Lehrnan Brothers Aggregate]	10.25%
Cash equivalents [Salomon Brothers 90-Day T-Bill]	1.70%

Plan Changes

The Economic Growth and Tax Relief Reconciliation Act of 2001 became effective for plan years beginning 2002. Changes include increases in the statutory limits on plan earnings and maximum benefits payable from qualified plans. These changes were reflected in the pension cost for 2002 and in the valuation as of July 1,2002 for contribution purposes.

Special Events

American divested its New England operations in a sale to Aquarion that closed on April 25,2002. The effect of that divestiture was recognized pro rata in the pension cost for 2002. It was reflected in the valuation as of July 1,2002 for contributions.

American acquired certain operations of Citizens as of January 15,2002. Active employees joined the American pension plan as of the closing date of the purchase. No assets or liabilities were transferred from Citizens. This acquisition was reflected in the valuation as of January 1,2002 for pension cost. It was reflected in the valuation as of July 1,2002 for contributions.

Effective January 1,2003 the assets and liabilities associated with the Northwest Indiana Water Company Retirement Plan were transferred into the American pension plan. Future benefit accruals for these participants were changed to reflect the American plan provisions. This merger was first reflected in the July 1,2002 valuation for contributions on a pro rata basis and the January 1,2003 valuation for pension cost.

FAS 87 Pension Cost and Funded Position

Pension cost is the amount recognized in American Water's financial statement as the cost of the pension plan and is determined in accordance with Financial Accounting Standard No. 87. The fiscal 2003 pension cost for the plan is $32,628,436, or 15.2% of covered pay.

Under FAS 87,'an important measure of funded position is a comparison of the fair value of assets (FV) 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. AW's balance sheet must reflect a minimum liability equal to the unfunded ABO for the 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).

The January 1,2003 valuation results shown on the 2002 year-end disclosure indicate an additional minimum liability of $12,841,044 and a reduction in shareholders' equity of $10,383,647.

The plan's ABO funded percentage is 81.2% as of January 1,2003, based on the fair value of assets of $270,546,409 and an ABO of $333,173,499.

Change in Pension Cost and Funded Position

The pension cost increased from $17,370,000 in fiscal 2002 to $32,628,000 in fiscal 2003 because:

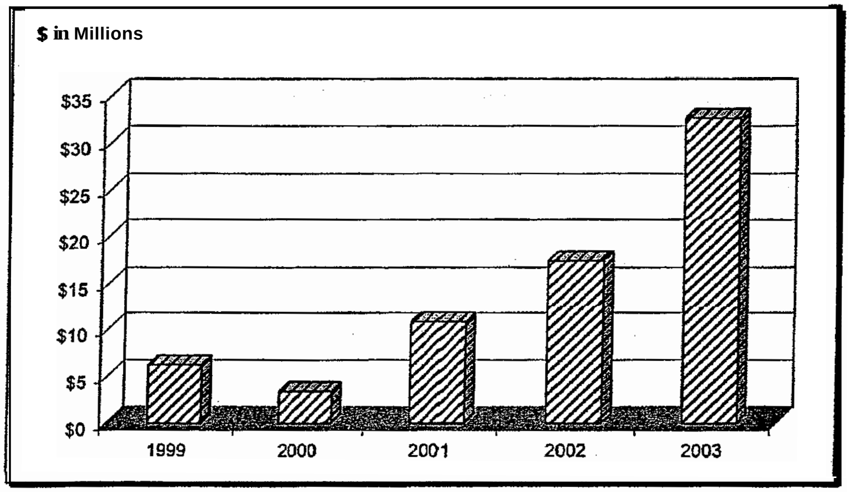
- Expected changes, based on the prior year's assumptions and methods, expiration of the transition asset and expiration of amortization periods for plan changes, the prior year's plan provisions, partially offset by the divestiture of New England Operations, increased the pension cost $1,748,000.
- Noninvestment experience increased the pension cost $1,013,000.
- The return on the fair value of plan assets was (7.6)% in fiscal 2002. This increased the pension cost $7,368,000.
- The change in discount rate increased the pension cost $4,314,000.
- The change in the expected return in assets rate increased the pension cost $683,000.
- The merger of Northwest Indiana Water Company increased pension cost $132,000.

The ABO funded percentage decreased from 105.9% to 81.2% primarily because of the lower than expected return on fair value of assets and the effect of the lower discount rate.

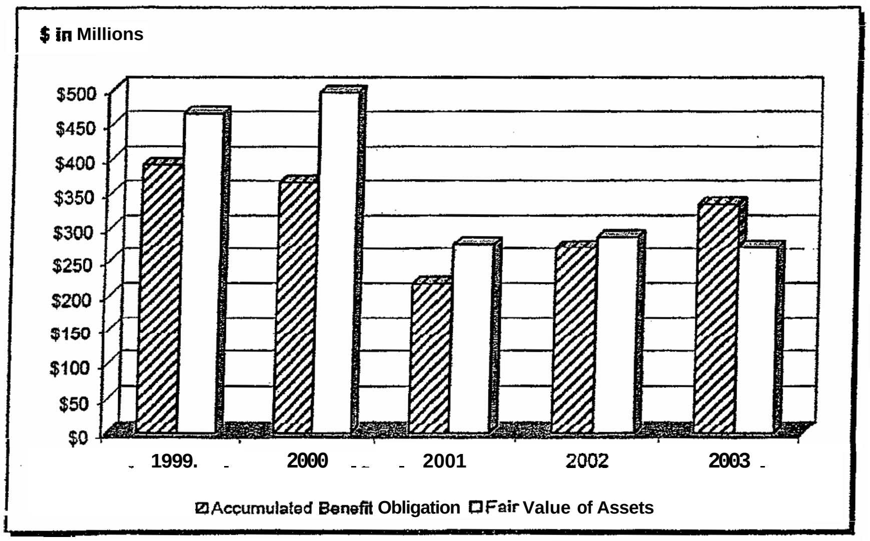
History of Pension Cost and Funded Position

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 and Fair Value of Assets



History of Pension Cast and ABO Funded Status

Fiscal Year	Pension cost	Accumulated benefit obligation	Fair value of assets	Discount rate
2003[1]	$ 32,628,436	$ 333,173,499	$ 270,546,409	6.75%
2002	17,369,508[2]	270,079,382[3]	286,100,020[3]	7.25
2001	10,763,520	216,855,338[4]	275,711,520[4]	7.50
2000	3,421,166[4]	364,880,330	495,480,432	8.00
1999	6,205,643	390,659,797	464,849,794	6.75

(1) Reflects the Northwest Indiana Water Company pension plan merger and full effect of the divestiture of the New England Operations.

(2) Reflects the NEI transfers, the Citizens acquisition and the divestiture of New England Operations on a **pro rata basis.**

(3) Reflects the NEI transfers.

(4) Reflects the settlement with First Allmerica Financial Services as of August 25, 2000.

Employer Contributions and ERISA Funded Position

American Water's funding policy is to contribute an amount equal to the minimum required contribution under ERISA. American Water may increase its contribution above the minimum if appropriate to its tax and cash position and the plan's funded position. For 2002, the minimum required contribution is $12,432,374. The **maximum deductible contribution under the Internal Revenue Code** is $12,432,374.

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 EFUSA, 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 109.3% as of **July** 1,2002, This percentage is based on an actuarial value of assets of $315,635,049 and an AAL of $288,890,229.

Change in Contribution Requirements and Funded Position

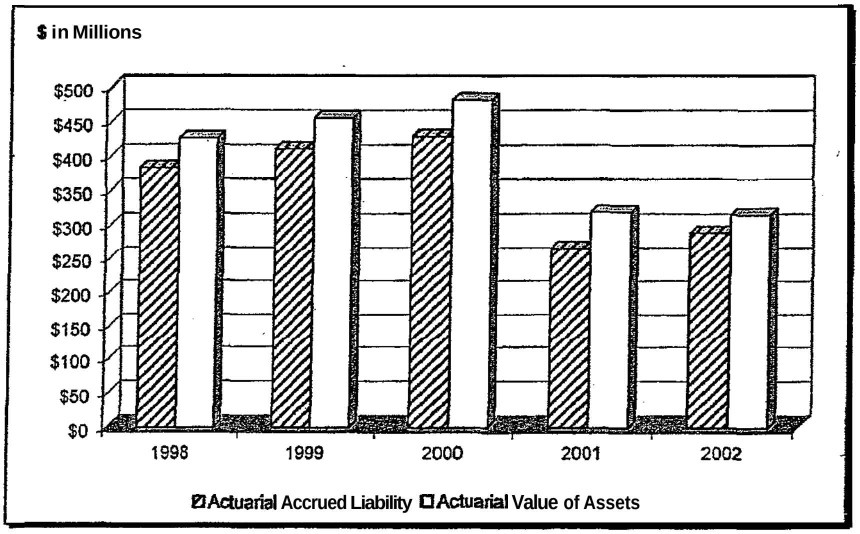
The minimum required contribution increased from $0 in 2001 to $12,432,374 in 2002 due to lower than expected asset returns. The decline in assets over the past few years resulted in an unfunded position for the plan on a market value basis. The plan no longer is considered fully funded and contributions are **once again required.**

The AAL funded percentage decreased from 120.4% at July 1,2001 to 109.3% at **July** 1,2002 on an actuarial asset value basis while the funded percentage on a market value basis decreased from 110.0% to 91.0% over the same period.

History of ERISA Funded Position

The following chart shows the history of the actuarial accrued liability and the actuarial value of assets.

History of Actuarial Accrued Liability and Actuarial Value of Assets



History of ERISA Funded Position

Year	Actuarial accrued liability	Actuarial value of assets	AAL funded percentage	Discount rate
2002	$ 288,890,229	$ 315,635,049	109.3%	9.00%
2001	265,802,556*	319,920,187*	120.4	9.00
2000	420,625,142	482,781,216	112.4	8.50
1999	411,188,634	456,068,456	110.9	8.50
1998	383,451,870	426,606,560	111.3	8.50

* Reflects the First Allmerica annuity purchase and the transfers from former NEI plans. Also reflects the changes in the actuarial cost method and the asset smoothing method.

Quarterly contributions for the 2003 plan year are not required based on this year's valuation results since the current liability funded status exceeds 100%.

Actuarial Certification

American Water Works Company, Inc. 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 Water Works Company, Inc. 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.

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Towers Perrin

November 2003

Supplemental Information

Asset Values

Asset Values for Calculating Pension Cost

Fair value, excluding contributions receivable:	
▸ As of January 1,2002	$ 286,100,020
▸ Contributions	6,150,000
Aquarion spin-off	(10,340,644)
▸ Northwest Indiana transfer receivable as of December 31,2002	14,476,701
▸ Disbursements	(4,591,784)
Investment return	(21,247,884)
• As of January 1,2003	$ 270,546,409
▸ Rate of return	(7.6)%
Market-related value:	
■ As of January 1,2002	$ 286,100,020
▸ As of January 1,2003	270,546,409
• Rate of return	(7.6)%

Asset Values for Calculating Employer Contributions

Market value, including contributions receivable:	
▲ As of July 1,2001	$ 292,277,678
▸ Contributions	0
• Aquarion spin-off	(10,114,042)
▸ Disbursements	(4,503,012)
▸ Investment return	(14,631,416)
▸ As of July 1,2002	$ 263,029,208
▸ Rate of return	(5.1)%
Actuarial value:	
▲ As of July 1, 2001	$ 319,920,187
▸ As of July 1, 2002	315,635,049
▸ Rate of return	3.3%
▸ Rate of return (assuming mid-year cash flow) for Schedule B of Form 5500	3.3%

Basic Results for Pension Cost

	January 1, 2003	January 1, 2002
Service Cost	$ 18,984,540	$ 15,862,597
Obligations		
Accumulated benefit obligation [ABO]:		
Participants currently receiving benefits	$ 60,165,886	$ 26,819,618
Deferred inactive participants	30,874,746	24,794,790
• Active participants	242,132,867	218,464,974
Total ABO	$ 333,173,499	$ 270,079,382
Obligation due to future salary increases	117,915,600	99,667,344
Projected benefit obligation [PBO]	$ 451,089,099	$ 369,746,726
Assets		
Fair value [FV]	$ 270,546,409	$ 286,100,020
Unrecognized investment losses (gains)	0	0
Market-related value	$ 270,546,409	$ 286,100,020
Funded Position		
Unfunded PBO	$ 180,542,690	$ 83,646,706
Minimum liability [ABO – FV, minimum zero]	62,627,090	0
Key Economic Assumptions		
Discount rate	6.75%	7.25%
Rate of return on assets	8.75%	9.00%
Salary increase rate	Age-graded scale averaging 4.75%	Age-graded scale averaging 4.75%

Development of Prepaid (Accrued) Pension Cost as of December 31, 2002	Fiscal 2002
Prepaid (accrued) pension cost, as of December 31,2001	$ (39,395,285)
Change during fiscal 2002:	
• Income (cost) recognized	(17,369,508)
► Employer contributions	6,150,000
Effect of curtailments, settlements, and termination benefits	0
► Divestiture of New England Operations	1,923,795
Merger of Northwest Indiana Water Company	(1,095,048)
Prepaid (accrued) pension cost, as of December 31,2002	$ (49,786,046)

	January 1, 2003	January 1, 2002
Reconciliation of Funded Status		
Funded status [FV – PBO]	$ (180,542,690)	$ (83,646,706)
Unrecognized net actuarial loss (gain)	128,304,100	42,921,392
Unrecognized prior service cost (credit)	2,457,397	2,697,613
Unrecognized transition obligation (asset)	(4,853)	(1,367,614)
Prepaid (accrued) pension cost	$ (49,786,046)	$ (39,395,285)
Balance Sheet Effects		
Prepaid pension cost	$ 0	$ 0
Accrued pension cost	(49,786,046)	(39,395,285)
Additional minimum liability	(12,841,041)	0
Intangible asset	2,457,397	0
Accumulated other comprehensive income	10,383,647	0
Balance sheet effect	$ (49,786,046)	$ (39,395,285)

The accumulated other comprehensive income has not been tax effected. Any tax effect should be separately recognized.

Pension Cost

	Fiscal 2003	Fiscal 2002
Pension Cost		
Service cost	$ 18,984,540	$ 15,862,597
Interest cost	31,505,447	27,191,066
Expected return on assets	(23,924,127)	(25,042,045)
Amortization:		
▸ Transition obligation (asset)	(4,853)	(1,362,761)
▸ Prior service cost (credit)	318,729	306,101
Net loss (gain)	5,748,700	414,550
Pension cost	$ 32,628,436	$ 17,369,508
Percent of covered pay	15.2%	8.8%
Per active participant	$ 7,813	$ 4,176

Change in Pension Cost	
Pension cost for fiscal 2002	$ 17,370,000
Change from fiscal 2002 to fiscal 2003:	
• Expected based on prior valuation including full reflection of the New England Operations divestiture	1,748,000
▸ Loss (gain) from noninvestment experience	1,013,000
▸ Loss (gain) from asset experience	7,368,000
▸ Change in discount rate	4,314,000
▸ Change in expected return on assets rate	683,000
▸ Plan amendments	0
▸ Merger of Northwest Indiana Water Coinpany	132,000
Pension cost for fiscal 2003	$ 32,628,000

Present Value of Accumulated Plan Benefits for *FRS* 35

	July 1, 2002	July 1, 2001
Actuarial Present Value of Accumulated Plan Benefits		
Vested benefits:		
• Participants currently receiving benefits	$ 40,361,788	$ 22,977,204
• Other participants	166,395,868	164,659,960
• Total vested benefits	$ 206,757,656	$ 187,637,164
Nonvested benefits	8,467,079	8,236,408
Total accumulated benefits	$ 215,224,735	$ 195,873,572
Market value of assets	263,029,208	292,277,678
Key Assumptions		
Interest rate	9.00%	9.00%
Average retirement age	62	62
Mortality	1983 GAM Table (sex distinct rates)	1983 GAM Table (sex distinct rates)

Change in Actuarial Present Value of Accumulated Plan Benefits

Actuarial present value of accumulated plan benefits as of July 1,2001	$ 195,873,572
Change from 2001 to 2002:	
▸ Additional benefits accumulated (including the effect of noninvestment experience)	13,692,153
▸ Interest due to decrease in the discount period	17,473,312
▸ Benefits paid	(3,527,296)
▸ Assumption changes	0
▸ Plan amendments	32,623
▸ Divestiture of New England Operations	(8,319,629)
Actuarial present value of accumulated plan benefits as of July 1,2002	$ 215,224,735

Basic Results for Employer Contributions

	July 1, 2002*	July 1, 2001
Normal Cost and Liabilities		
Normal cost	$ 11,755,395	$ 10,771,470
Actuarial accrued liability [AAL]	288,890,229	265,802,556
Current liability [CL]:		
▸ Selected interest rate	294,866,061	305,125,322
Highest allowable interest rate	294,866,061	305,125,322
Assets		
Market value	$ 263,029,208	$ 292,277,678
Unrecognized investment losses (gains)	52,605,841	27,642,509
Actuarial value [AV]	$ 315,635,049	$ 319,920,187
Funded Position		
Unfunded actuarial accrued liability [AAL − AV]	$ (26,744,820)	$ (54,117,631)
AAL funded percentage [AV ÷ AAL]	109.3%	120.4%
CL funded percentage:		
▸ Selected interest rate	107.0%	104.9%
Highest allowable interest rate	107.0%	104.9%
Key Economic Assumptions		
Discount rate for normal cost and actuarial accrued liability	9.00%	9.00%
Current liability interest rate:	6.80%	6.09%
Salary increase rate	Age-graded scale averaging 5.00%	Age-graded scale averaging 5.00%

* All values are as of July 1; 2002 and therefore do not reflect the merger of the Northwest Indiana Pension Plan except for normal cost which includes a pro rata portion of the merged plan.

Minimum Required Employer Contribution

	July 1, 2002	July 1, 2001
Minimum Required Employer Contribution		
Normal cost	$ 11,755,395	$ 10,771,470
Amortization amounts	0	0
Interest adjustments	1,057,986	969,432
Additional funding charge	0	0
Credit balance with interest	(364,657)	(346,889)
Minimum required contribution before full funding limit	$ 12,448,724	$ 11,394,013
Minimum required contribution after full funding limit*	12,432,374	0

Additional details regarding the calculation of the minimum required employer contribution may be obtained from the Form 5500 Schedule B filings and attachments.

Schedule of Required Minimum Employer Contributions		
October 15	$ 0	$ 0
January 15 (following)	0	0
April 15 (following)	0	0
July 15 (following)	0	0
March 15 (following)	12,432,374	0

Quarterly contributions for the 2003 plan year are not required since the plan's current liability funded status exceeds 100% for the 2002 plan year.

* As of January 1, 2003, the Northwest Indiana Water Company Retirement Plan was merged into the AW Pension Plan. As of June 30, 2003, a full funding credit of $15,624 attributable to the Northwest Indiana plan was included for the determination of the minimum contribution requirement.

Maximum Deductible Employer Contribution

	July 1, 2002	July 1, 2001
Maximum Deductible Employer Contribution		
Maximum deductible contribution before adjustments	$ 12,276,674	$ 11,249,728
Allowable deduction, the greatest of:		
• Maximum deductible contribution after full funding limit*	12,261,674	0
• Contribution necessary to satisfy minimum funding standards	12,432,374	0
• Contribution necessary to fund 100% of current liability	0	0
Maximum deductible contribution	12,432,374	0

The timing of this deduction may be affected by the uniform capitalization rules. Deductlbllity 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.

The maximum deductible contribution depends on the selected current liability interest rate. The permissible range for the current liability interest rate for the plan year beginning July 1,2002 is 5.10% to 6.80%. In the above fable, the contribution necessary to fund 100% of current liability is $0, which is based on a current liability interest rate of 6.80%. At the lowest interest rate of 5.10%, the maximum deductible contribution for the pension plan on a stand alone basis would be $103,602,428. This does not *reflect* the 25% of pay combined plan limitation. Please note that depending on the current liability interest rate selected additional requirements may apply.

* As of January 1,2003 the Northwest Indiana Water Company Retirement Plan was merged into the AW pension plan. As of June 30, 2003, a full funding credit of $15,000 attributable to the Northwest *Indiana* plan was included in the determination of the maximum tax deductible contribution.

Actuarial Assumptions and Methods

	Pension Cost	Contributions
Economic Assumptions		
Discount rate	6.75%	9.00%
Return on assets	8.75%	NIA
Current liability:		
• Selected interest rate	NIA	6.80%
▸ Highest allowable interest rate	NIA	6.80%
Annual rates of increase in:		
Compensation		
Sample rates:		

Age	% Increase	% Increase
25	6.35%	6.60%
35	4.95%	5.20%
40	4.65%	4.90%
45	4.45%	4.70%
55	4.15%	4.40%
Average rate	4.75%	5.00%

	Pension Cost	Contributions
▴ Future Social Security wage bases	4.25%	4.50%
Indexed limits on compensation and benefits	3.75%	N/A

Demographic Assumptions

Mortality

For healthy participants, 1983 GAM Table. Rates vary by age and gender.

For disabled participants, select and ultimate mortality rates from the PBGC disabled mortality for Social Security recipients.

Termination	Rates varying by age Sample rates:

Age	Rate
25	.060
35	.030
40	.020
45	.015
55	.000

Disability — 50% of 1987 CGDT (shown below)

Sample annual rates of disablement:

Age	Male	Female
25	.0004	.0006
35	.0006	.0012
40	.0010	.0015
45	.0018	,0023
55	.0059	.0053

Retirement — Rates varying by age averaging 62; terminated vested participants, age 65

Age	Rate	Age	Rate
55	.05	63	.40
56	.02	64	.40
57	.02	65	.80
58	.02	66	.10
59	.02	67	.30
60	.05	68	.30
61	.04	69	.10
62	.60	70	1.00

Form of payment	Life annuity. Normal cost and actuarial accrued liability have been increased by .2% for the two-year "popup[a] provision.
Administrative expenses	$115,000 is added to the plan's normal cost.
Percent married	90% males, 60% females, assumed married.
Spouse age	Wife three years younger than husband
Valuation compensation	For accounting purposes: annualized rate of pay on prior July 1 plus the target incentive award For contribution purposes: the annual rate of pay as of July 1 plus the target incentive award Annual rates of pay are increased 3% for houdy and salaried-nonexempt employees to approximate total company overtime.
Maximum benefit	For contribution purposes: $160,000 for 2002, payable at age 62.

	For accounting purposes: $1 60,000 for 2003 (with other changes enacted by EGTRAA), increasing with inflation.
Maximum pensionable earnings	For contribution purposes: $200,000 for 2002 For accounting purposes: $200,000 for 2003, increasing with inflation.

Methods

Pension cost:

▸ Measurement date	January I, 2003
▸ Service cost and projected benefit obligation	Projected unit credit
▸ Market-related value of assets	Fair value
Amortization of unrecognized amounts:	
– Transition obligation (asset)	Transition obligation (asset) at the initial adoption of FAS 87 is amortized on a straight-line basis over the average future working lifetime as of the date of adoption, or 15 years, if longer.-
– Prior service cost (credit)	Increase in PBO resulting from a plan amendment is amortized on a straight-line basis over the expected average remaining service of active participants.
– Net loss (gain)	Net loss (gain) in excess of 10% of the greater of the PBO or the market-related value of assets is amortized on a straight-line basls over the expected average remaining service of active participants.

Contributions:

▸ Valuation date	July 1, 2002 ,
▸ Normal cost and actuarial accrued liability	Projected unit credit
• Actuarial value of assets	Beginning July 1, 2001, a preliminary actuarial value of assets as of the valuation date is determined as the market value of assets as of the valuation date less the following percentage applied to investment gains (losses) from previous years: 80% for the year ending on the valuation date 60% for the previous year 40% for the second previous year ▪ 20% for the third previous year The preliminary actuarial value is then adjusted to be within a corridor of 80% to 120% of the market value.

Funding policy	The company's funding policy is to contribute an amount at least equal to ihe minimum required contribution under ERISA. American Water Works may increase its contribution above the minimum, if appropriate to its tax and cash position and the plan's funded status.
Benefits Not Valued	All benefits described in the Plan Provisions section of this report were valued. Towers Perrin has reviewed documentation provided by American Water Works and is not aware of any significant benefits that were not valued.

Change in Assumptions and Methods Since Prior Valuation

Pension cost	The discount rate for benefit obligations was changed from 7.25% to 6.75%. The expected rate of return on assets was changed from 9.00% to 8.75%.
Contributions	The current liability interest rate was changed from 6.09% to 6.80%, which is within the permissible range.

Data Sources

Towers Perrin used asset data supplied by the trustee and the company. Assets due to be transferred for the former NEI plans, as well as assets due to be spun off for the divestiture of New England operations, were determined in accordance with Internal Revenue rules for spinoffs/mergers. American Water Works furnished participant data as of July 1, 2002. In addition, accrued pension costs were furnished as of December 31, 2002. Data were reviewed for reasonableness and consistency. Towers Perrin is not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

Participant Data

	duly 1, 2002*	July 1, 2001
Active		
Number	4,176	3,916
Average age	45.3	45.6
Average past service	15.6	16.4
Average future service	14.5	14.3
Covered compensation:		
▸ Total	$ 214,251,932	$ 190,008,146
▸ Average	51,306	48,521
Deferred Inactive		
Number	1,277	1,048**
Average age	47.0	46.1
Annual benefits:		
• Total	$ 8,954,821	$ 7,260,766
▸ Average	7,012	6,928
Currently Receiving Benefits		
Number	261	144
Average age	61.0	61.0
Annual benefits:		
▸ Total	$ 4,156,491	$ 2,359,326
• Average	15,925	16,384
Total Participants Included in Valuation		
Number	5,714	5,108

* Does not include Northwest Indiana Water Company participants who transferred into this plan at January 1, 2003.

** Does not include NEI participants who transferred into this plan as of July 1, 2001.

Analysis of Inactive Participant Data

Deferred Inactive

Age last birthday	Number	Annual benefit	Average annual benefit
< 50	819	$ 5,388,495	$ 6,579
50 – 54	219	2,113,934	9,653
55 – 59	146	1,053,326	7,215
60 – 64	79	341,901	4,328
> 64	14	57,165	4,083
Total	1,277	8,954,821	$ 7,012

Currently Receiving Benefits

Age last birthday	Number	Annual benefit	Average annual benefit
< 55	19	$ 136,255	$ 7,171
55 – 59	79	1,109,023	14,038
60 – 64	127	2,495,873	19,653
65 – 69	31	357,531	11,533
70 – 74	3	48,480	16,160
75 – 79	1	7,268	7,268
80 – 84	1	2,061	2,061
> 84	0	0	0
Total	261*	$4,156,491	$15,925

* The average number of years of service for individuals who retired between July 1, 2001 and July 1,2002 was 26.39 years.

Towers Perrin

ANALYSIS OF ACTIVE PARTICIPANT DATA BY AGE, SERVICE AND EARNINGS AS of 07/01/2002

Age Last Birthday		Completed Years of Service: 0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
15-19	Number	1	0	0	0	0	0	0	0	1
	Tot earnings	24,960	0	0	0	0	0	0	0	24,960
	Avg earnings	24,960	0	0	0	0	0	0	0	24,960
20-24	Number	47	2	0	0	0	0	0	0	49
	Tot earnings	1,447,711	104,383	0	0	0	0	0	0	1,552,094
	Avg earnings	30,802	52,192	0	0	0	0	0	0	31,675
25-29	Number	147	24	3	0	0	0	0	0	[illegible]
	Tot earnings	5,361,925	945,107	120,494	0	0	0	0	0	[illegible]
	Avg earnings	36,476	39,379	40,165	0	0	0	0	0	[illegible]
30-34	Number	[illegible]	[illegible]	65	[illegible]	0	0	0	0	333
	Tot earnings	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	14,239,957
	Avg earnings	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	42,763
35-39	Number	163	87	217	90	12	0	0	0	569
	Tot earnings	7,015,302	4,206,662	10,671,376	4,339,864	664,786	0	0	0	26,897,990
	Avg earnings	43,039	48,352	49,177	48,221	55,399	0	0	0	47,272
40-44	Number	138	104	211	221	155	16	0	0	845
	Tot earnings	6,287,802	5,215,225	10,720,100	12,507,257	8,272,764	777,015	0	0	43,780,163
	Avg earnings	45,564	50,146	50,806	56,594	53,373	48,563	0	0	51,811
45-49	Number	94	84	155	163	246	122	14	0	878
	Tot earnings	4,801,003	4,472,216	7,871,382	8,576,940	13,862,162	6,789,071	588,993	0	46,961,767
	Avg earnings	51,075	53,241	50,783	52,619	56,350	55,648	42,071	0	53,487
50-54	Number	66	49	82	[illegible]	153	[illegible]	136	[illegible]	[illegible]
	Tot earnings	[illegible]	2,910,488	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Avg earnings	[illegible]	59,398	[illegible]	[illegible]	[illegible]	[illegible]	61,922	[illegible]	[illegible]
55-59	Number	32	20	33	42	67	57	135	69	[illegible]
	Tot earnings	1,718,712	1,334,016	1,996,077	2,130,959	3,431,344	2,841,774	8,076,695	3,910,792	[illegible]
	Avg earnings	53,710	66,701	60,487	50,737	51,214	49,856	59,827	56,678	[illegible]
60-64	Number	11	7	7	14	12	14	31	50	146
	Tot earnings	664,237	345,470	431,360	595,511	594,518	626,833	1,730,141	4,397,692	9,385,762
	Avg earnings	60,385	49,353	61,623	42,537	49,543	44,774	55,811	87,954	64,286
Over 64	Number	2	1	2	3	0	2	1	2	13
	Tot earnings	59,250	16,162	115,192	105,762	0	102,374	38,106	104,847	541,693
	Avg earnings	29,625	16,162	57,596	35,254	0	51,187	38,106	52,424	41,669
Total	Number	869	475	775	626	645	338	317	131	4,176
	Tot earnings	[illegible]	[illegible]	38,636,155	[illegible]	[illegible]	18,779,175	[illegible]	[illegible]	214,251,932
	Avg earnings	[illegible]	[illegible]	49,853	[illegible]	53,534	55,560	59,481	[illegible]	51,306

Average Age = 45.3 Average Service = 15.6

Plan Provisions

Plan Provisions as of July 1, 2002

1. Effective Date: July 1, 1952. Most recent amendment effective July 1,2003.

2. Definitions:

   (a) Average Social Security Wage Base: Average of the maximum amounts subject to Social Security taxation for the year of retirement or termination and the nine preceding years.

   (b) Earnings: Total compensation for services paid as an annual salary or as an hourly wage plus annual incentive awards paid in cash during the period, subject to a maximum amount as set forth in the Tax Reform Act of 1986.

   (c) Final Average Earnings: The highest average monthly Earnings during the 60 consecutive months of the final 120 months (or lesser period of employment) preceding termination from employment or retirement.

   (d) Year of Service:

   (i) For periods prior to the first anniversary of employment after July 1,1975: A Year of Service is credited for each year of continuous service during which the employee's customary employment was for more than 1,000 hours per year, subject to the following exceptions:

   (a) California-American Water Company: Only continuous service accrued beginning December 28, 1970 is credited for the purpose of determining the amount of benefits payable under the Plan (in addition to any prior plan benefits).

   (b) West Virginia Water Company and Yardley Water Company: Only service accrued beginning December 1, 1970 is credited for the purpose of determining the amount of benefits accrued under the Plan (in addition to any prior plan benefits). Service for eligibility purposes and for the schedule of early retirement factors is measured from the original date of hire.

   (ii) For periods beginning on or after the first anniversary of employment after July 1, 1975: In general, a Year of Service is credited for each 12-month period commencing on the employee's anniversary date of employment during which the employee completes 1,000 hours of service. For the purpose of determining the amount of benefits of any participant (other than a part-time employee) who completes at least 1,000 but fewer than 2,080 hours of service in this 12-month period. the participant is credited with the fraction of a **Year of Service** determined by dividing his actual hours of service by 2,080. The following exceptions apply:

(a) Hershey Water Company: Employees on April 19,1977 who were vested in benefits accrued under the prior plan receive credit only for service beginning April 19, 1977.

(b) Pekin Water Comuanv: Nonunion participants who were members of the prior plan get credit for all service less any prior plan benefit. Other nonunion employees get credit for periods of service beginning January 1,1982. Union employees' service is credited for periods beginning April 1, 1982 for the purposes of determining the amount of benefits payable under the Plan (in addition to any prior plan benefits).

(c) Sevmour Water Company: Only service accrued beginning March 16,1982 is credited for the purpose of determining the amount of benefits payable under the Plan (in addition to any prior plan benefits).

(d) New Mexico-American: All service is credited, including periods before the August 1,1986 acquisition. The prior plan benefit is a minimum.

(e) Indiana-American Terre Haute Plan: Only service accrued beginning May 11, 1987 is credited for the purpose of determining the amount of benefits payable under the Plan (in addition to any prior plan benefits).

(f) Brownsville Water Company: Only service accrued beginning July 2, 1990 is **credited** for the **purpose** of determining the amount of benefits payable under the Plan (in addition to any prior plan benefits).

(g) California Water Comuanv: Only service accrued beginning July 2,1990 is credited for the purpose of determining the amount of benefits payable under the Plan (in addition to any prior plan benefits).

(h) Avatar Utilities Inc: Only service accrued beginning September 1, 1993 is credited for the purpose of determining the amount of benefits payable under the Plan (in addition to any prior plan benefits).

(i) PG Energy: Only service accrued beginning February 16,1996 is credited for the purpose of determining the amount of benefits accrued under the Plan (in addition to any prior plan benefits). Service for eligibility and vesting purposes and for the schedule of early retirement factors is measured from the original date of hire.

(j) United Water Resources, Inc.: Dates of acquisition are shown below:

Location	Dare
United Water of Indiana	February 1,2000
United Water of West Lafayette	February 1,2000
United Water of Virginia	February 29,2000
United Water of Missouri	May 1,2000
United Water of Illinois	May 31,2000

(i) Nonunion employees: Service for eligibility purposes and for the schedule. of early retirement factors is measured from the original date **of** hire. Service for benefit accrual is measured from the date **of** acquisition.

(ii) Union employees: Service for all purposes is measured from the original date of hire. All benefits are determined under the United Waterworks Plan **formula** in **effect *on the*** date **of acquisition.**

(k) City of Coatesville Authority: **Only** service accrued beginning March 23,2001 is credited for the purpose of determining the amount of benefits accrued under the Plan. Service for eligibility to participate, vesting **and** early retirement eligibility is measured from the original date of hire.

(l) Citizens Utilities Companies: **Only** service accrued beginning January 15,2002 is credited for the purpose of determining the amount **of** benefits payable **under** the Plan. Service for eligibility and vesting purpose and for the schedule of early retirement factors is measured from the original date of hire.

3. Eligibility for Participation: Each employee commences participation on the first day of the calendar month next following completion of one Year of Service.

4. Benefits:

(a) Normal **Retirement Benefit:**

(i) Normal retirement date: The first day of the calendar month next following the **participant's** 65th birthday.

(ii) Basic monthly benefit: The sum of **(A)** or (B) below:

(A1) For service before July 1,2001 for American Water Works employees (other than former NEI plan participants), the larger of (1) or (2) below:

(1) The sum of (a) plus (b) plus (c):

(a) 1.85% of Final Average Earnings not in excess of the Average Social Security Wage Base multiplied by Years of Service up to 25 years.

(b) 2.10% of Final Average Earnings in excess of the Average Social Security Wage Base multipiied by Years of Service up to 25 years.

(c) 0.70% of Final Average Earnings multiplied by Years of Service in excess of 25 years.

(2) The benefit accrued under the Plan formula as of June 30,1989.

(A2) For service before July 1,2001 for former nonunion NEI participants, the benefit formula in effect under the provisions of the former NEI plans using the Final Average Earnings described in 2(c) above.

(B) For service on or after July 1,2001 sum of (1) + (2) + (3):

(1) 1.6% of Final Average Earnings not in excess of the Average Social Security Wage Base multiplied by Years of Service up to 25 years.*

(2) 2.1% (1.6% for Union Associates and former nonunion NEI participants and new participants after July 1,2001) of Final Average Earnings in excess of the Average Social Security Wage Base multiplied by Years of Service up to 25 years."

(3) 1.6% of Final Average Earnings multiplied by Years of Service in excess of 25 years.*

* The threshold of 25 years of service is based on total service, including Years of Service credited prior to July 1,2001

In addition to the above amounts, benefits are payable under prior plans that have been merged into this Plan: for the Pekin, Seymour, California-American, West Virginia Water Companies and the Indiana-American Terre Haute Plan, the Brownsville Water Company, California Water Company, Avatar Utilities Inc. and PG Energy. Also, any benefits payable through a purchased annuity are subtracted from the above amounts (under Metropolitan contracts #153 and #369).

(b) **Early Retirement** Benefit:

(i) Early retirement date:

- For American Water Works employees, former St. Louis County employees and Long Island employees, the first day of any month on which the employee elects to retire provided that:

  (a) the participant has attained age 55, and

  (b) the sum of the individual's age and Years of Service totals at least 70.

- For former employees of Northwest Indiana prior to July 1,2001, the first day of **any** month on which the employee elects to retire provided that the participant has attained age 55 **and** completed **five** Years ***of*** **Service.**

- For former employees of Northern Illinois prior to July 1,2001, the first day of **any** month on which the employee elects to retire provided that the employee has attained age 55.

(ii) **Basic monthly benefit:** The **benefit as in** (a)(ii) above based upon Earnings and **Years** of Service to the date of early retirement, multiplied by the appropriate factors from the Schedule of Early Retirement Factors contained in the Plan document. For benefits attributable to service prior to July 1,2001 under the former NEI plans' provisions, the applicable early retirement factors are those attributable to the former plans.

(iii) Supplemental Early Retirement Income: For Long Island employees hired prior to **July** 1,2001 who retire and whose age plus service at retirement is at least 90 points, benefit is $100 per month reduced by 5% for each point below 90. This benefit is payable **until** age 65.

(c) Vested Benefit:

(i) Eligibility: Completion **of five** Years of Service.

(ii) Basic monthly benefit: The benefit as in (a)(ii) or (b)(ii), whichever is applicable, based upon **Earnings** and **Years of Service** to **date of termination.**

(d) Disability Benefit:

(i) Disabilitv retirement date: The first day of the seventh month following the submission of evidence of permanent disability, provided that the employee has completed 10 Years of Service **and** qualifies for disability benefits from the Social Security Administration.

(ii) Basic monthly benefit: (a) plus any frozen benefit payable under the prior plans for former employees of Pekin Water Company, Seymour Water Company and West Virginia Water Company:

(a) the benefit accrued under section (4)(a)(ii) based on Earnings and Years of Service at the date of disability without reduction for early commencement.

(e) Preretirement Death Benefit:

(i) Eligibility: Monthly benefits under (ii) depend on the status of the participant **as** follows:

(a) All employees eligible for early retirement as of the date of death, provided the employee is married or has designated a contingent annuitant.

(b) All mamed employees not eligible for early retirement with at least 10 Years of Service on the date of death,

(c) All married active employees not eligible for early retirement with at least five Years of Service but less than 10 on the date of death and all married former employees who had completed at least five Years of Service but were not eligible for Early Retirement at termination and have not begun to receive retirement benefits.

(ii) Monthlv benefit:

(a) The benefit that would have been payable to the employee if the participant had retired early on the date of death and elected to receive a 100% contingent **annuity.**

(b) An immediate benefit, based on the amount that would have been payable to the **employee had the employee retired on the date of death and elected to receive a 100%** contingent annuity. Such benefit will be based upon the Early Retirement Factor for the employee's age at death (or, if greater, age 55) and the number of Years of Service at death. Such benefit will also be based upon the 100% Contingent Annuity Factor for the employee's age at death (or, if greater, age 55) with a spouse's age that bears the same relation as to that at death.

(c) **A** deferred benefit, based on 50% of the amount that would have been payable to the participant had he survived to age 55 and elected a 50% contingent annuity. Such benefit will be based upon the Early Retirement Factor and the 50% Contingent Annuity Factor for an employee age 55, the number of **Years** of Service completed at death or termination, and the spouse's then attained age.

(iii) Duration of benefit: Monthly benefits are payable during the lifetime of the survivor.

(f) Special Prior Plan Preretirement Death Benefits:

(i) California-American Water Works: All former employees not eligible for early retirement on the date of death will receive the amount of their accumulated contributions with interest.

(ii) West Virginia Water Works: **All** former employees not eligible for early retirement on the date of death will have the accrued frozen benefit without reduction payable for 10 years.

5. Form of Retirement and Disability Benefits:

(a) Normal Form:

(i) Married participants: 50% contingent annuity (with two-year "pop-up"), with monthly payment equal to the actuarial equivalent of the basic benefit.

(ii) Single participants: Life annuity, with monthly payment **equal** to the basic benefit.

(iii) For former employees of Pekin Water Company, Seymour Water Company and West Virginia Water Company, 10 years certain and continuous annuities are payable with regard to amounts due from prior **plan.**

(b) Optional Forms: Life annuity; 100%, 66 2/3% or 50% contingent annuity (with two-year "pop-up"); and 5-year, 10-year, or 15 year* certain and continuous annuity.

6. Maximum Benefits: Maximum benefits payable conform to those set forth in the Employee Retirement Income Security Act of 1974 and the Tax Reform Act of 1986.

* **Effective January** 1,2002.

Changes in Plan Provisions Since Prior Year

As of January 1,2003, the plan was mended to include employees of Northwest Indiana Water **Company.** Benefits attributable to service before January 1,2003 are based on the former plan's provisions, while benefits earned after January 1,2003 are based on American's benefit provisions. This change was recognized on a pro rata basis for ERISA funding purposes in the July 1,2002 valuation. In addition, current year changes in the Internal Revenue Code maximum on benefits and earnings were reflected.

Glossary of Selected Terms

Actuarial Accrued Liability — The cost allocated to years prior to the valuation date under the plan's funding method (contribution basis).

Accumulated Benefit Obligation (ABO) — The present value of benefits earned by participants prior to the measurement date. The benefits are based on compensation earned prior to the valuation date (pension cost basis).

Accrued/Prepaid Pension Cost — Cumulative employer contributions less than/in excess of pension cost (pension cost basis).

Actuarial Asset Value — A smoothed value of assets, used in calculating the plan's contributions (contribution basis).

Current Liability Rate — The interest rate used to calculate the current liability. The rate is determined by the IRS (contribution basis).

Current Liability — The value of accrued benefits calculated using the current liability rate (contribution basis).

Discount Rate — The interest rate used to adjust liabilities and obligations for the time value of money. It is used in calculating the service cost and benefit obligations (pension cost basis).

Expected Rate of Return — The assumption as to the rate of return on plan assets reflecting the average long-term rate of earnings cxpcctcd on the funds invested ('pension cost basis).

Full Funding Limitation — A plan contribution is not required, nor is it deductible, if either:

(i) the plan's expected assets exceed the plan's expected actuarial accrued liability at the end of the year, or

(ii) the plan's expected assets exceed 165% of the expected current liability at the end of the year,

Funded Status — A comparison of the plan's assets and liabilities at a particular point in time.

Gain or Loss — A change in the value of the projected benefit obligation, actuarial accrued liability or plan assets resulting from experience different from that assumed. On the pension cost basis, a change in these values arising from a change in actuarial assumptions is also considered a gain or loss.

Market Value of Assets — The value of assets reported by the trustee, adjusted for plan receivables and payables.

Market-Related Value of Assets —At the option of the plan sponsor, a smoothed value of assets may be used in calculating the expected return on plan assets component of pension cost.

Maximum Deductible Contribution —The largest amount the plan sponsor may contribute to the plan and deduct for tax purposes without incurring a penally.

Measurement Date — The date as of which assets and obligations are measured in determining pension cost.

Minimum Required Contribution — The smallest amount the plan sponsor may contribute to the plan without incurring a penalty.

Normal Cost — The cost allocated to the current year by the plan's funding method (contribution basis).

Proiected Benefit Obligation (PBO) — The present value of benefits earned by participants prior to the measurement date. The benefits are based on the employee's projected compensation (pension cost basis).

Service Cost — The present value of benefits earned by employees during the year covered by this valuation. The benefits are based on the employee's projected compensation (pension cost basis).

Valuation Date — The date as of which assets and liabilities are measured.

10% Comdor — Gains or losses that, in the aggregate, are less than 10% of the greater of the projected benefit obligation or the plan's market-related value of assets may be excluded from the determination of pension cost.

American Water Works Company, Inc.
Retiree Welfare Plan

Actuarial Valuation Report

Postretirement Welfare Cost for Fiscal Year Ending December 31, 2003

Employer.Contributions for Plan Year Beginning January 1,2003

November 2003

Towers Perrin

Table of Contents

Management Summary of Valuation Results

Financial Results

This report summarizes the financial results for American Water Works Company, Inc.'s Retiree Welfare Plan based on actuarial valuations as of January 1, 2003 and January 1, 2002.

	January 1, 2003	January 1, 2002
FAS 106 Postretirement Welfare Cost*		
Amount	$ 24,314,174	$ 18,283,524
Per active participant	6,226	4,732
FAS 106 Funded Position*		
Accumulated postretirement benefit obligation [APBO]	$ 270,629,183	$ 236,023,333
Fair value of assets [FV]	132,108,702	139,871,228
APBO funded percentage [FV ÷ APBO]	48.8%	59.3%
Accrued Postretirement Benefit Cost	$ 13,090,625	$ 13,108,666
Employer Contributions		
Funding policy	$ 24,314,174	$ 18,283,524
Estimated maximum tax-deductible limit*"	39,391,000	38,620,000***
Expected benefit payments and expenses, net of participant contributions	11,655,579	10,103,01[illegible]

* All results are shown based on FAS 106 before application of purchase accounting due to the safe of American Water Works to RWE.

** Estimated based on January 1 assets — should be redetermined at December 31. Actual maximum tax-deductible limit cannot b e determined until end of year.

*** Actual tax-deductible limit for 2002 tax year was $39,100,000.

Highlights

Economic Assumptions

The discount rate for postretirement welfare cost purposes is the rate at which *the* postretirement obligation could bc effectively settled. This rate is based *on* high-grade bond yields, after allowing for call and default risk. The following bond yields were considered in the selection of economic assumptions:

	December 31,2002	December 31, 2001
30-year Treasury	4.76%	5.48%
Moody's Aaa	6.09%	6.61%
Moody's Aa	6.52%	7.08%

The assumed rate of return on assets for postretirement welfare cost purposes is the weighted average of expected long-term asset return assumptions, net of taxes. The compensation increase rate is a long-term rate based on current expectations of future compensation increases. The assumptions for postretirement welfare cost purposes are:

	January 1, 2003	January 9,2002
Discount rate for obligations	6.75%	7.25%
Rate of return on assets (pre-tax)	8.75%	9.00%
Assumed tax rate on investment income - VEBA*	38.00%	38.00%
Rate of return on assets (after-tax)	8.40%	8.30%
Average compensation increase rate	4.75%	4.75%

* Assumed to apply to 10% and 20% of assets expected to be invested in a taxable medical trust (for non-bargaining employees) for fiscal years beginning January 1,2003 and January 1, 2002, respectively.

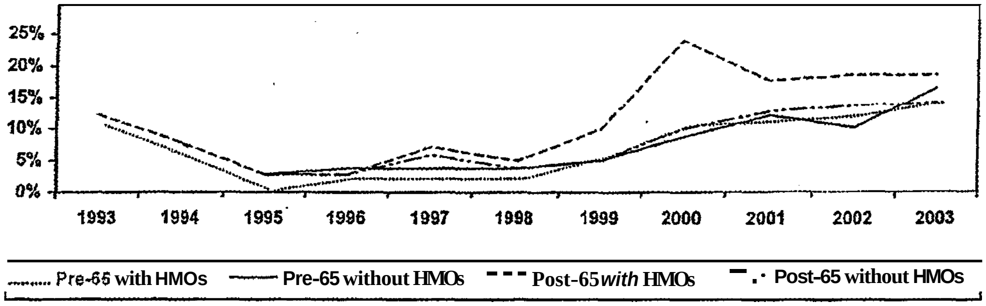
Assumptions used to determine the statutory contribution limits must be reasonable, taking into account the experience of the plan and reasonable expectations. The discount rate **used** to determine normal cost and present value of projected benefits is based on the long-term expected return on assets, net of taxes. The assumptions for contribution purposes are:

	January 1, 2003	January 1, 2002
Discount rate for normal cost and present value of projected benefits:		
• Bargaining medical and life insurance	8.50%	8.50%
Non-bargaining medical	5.25%	5.25%
Average compensation increase rate	4.75%	4.75%

Health Care cost Trend Rate Assumptions

Health care cost trend rate is the assumed rate of increase in per capita health care charges. It is disclosed in American Water Works' financial statements.

As reported by the Towers Perrin Health Care Cost Survey, trend **rates** have historically shown a cyclical pattern, **rising** in some years and falling in others, and have been sensitive to a plan's demographics, mix of benefits offered and utilization of procedures. In recent years, plans with large HMO populations have experienced significantly greater trend than **those** without, **as** demonstrated in **the graph below:**



In addition to HMO experience, the health carc cost trends vary considerably from plan to plan largely driven by the level of **exposure** to prescription **drug** increases, rapidly rising hospital unit costs, and increasing demand for expensive diagnostic tests.

The range of plan results reported in the 2003 Health Care Survey was:

	Pre-65 with HMOs	Pre-65 without HMOs	Medicare eligible with HMOs	Medicare eligible without HMOs
25th percentile	9%	7%	10%	6%
50th percentile	**15%**	**13%**	**15%**	**14%**
75th percentile	21%	20%	24%	20%

The health care cost trend assumptions used in the valuation are:

	January 1,2003		January 1,2002	
	Under age 65	*Age 65 and over*	*Under age 65*	*Age 65 and over*
Health Care Cost Trend				
2002 trend	N/A	N/A	10.0%	10.0%.
2003 trend	9.0%	9.0%	9.0%	9.0%
Ultimate trend	5.0%	5.0%	5.0%	5.0%
Year ultimate reached	2007	2007	2007	2007

The assumed per capita costs are the expected annual per person cash costs of the medical plan, before reflecting participant contributions.

The per capita costs used in the 2002 and 2003 valuations are:

	Under age 65		*Age 65 and over*	
	Employee	*Spouse*	*Employee*	*Spouse*
Managed Choice Plan:				
2002 assumed per capita cost	$6,435	$6,435	$2,458	2,458
▸ Assumed trend to 2003	10.0%	10.0%	10.0%	10.0%
• 2003 expected per capita cost	$7,079	$7,079	$ 2,704	$2,704
• 2003 assumed per capita cost	6,972	6,972	2,847	2,847

Demographic Assumptions

The cost of providing plan benefits depends on demographic factors such as retirement, mortality, turnover and plan participation. 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, plan costs will be lower. Alternatively, if actual experience is less favorable than assumed, future plan costs will be higher. The demographic assumptions have not changed since the prior valuation.

Assets

In the year ended December 31,2002, the plan's portfolio realized a (6.6)% investment return (net of expenses and taxes), while the capital markets performed as follows:

	December 31,2002
Large equities [S&P 500]	(22.10)%
Intermediate/small equities [Russell 2500]	(17.80)%
Non-U.S. equities [EAFE]	(15.66)%
Bonds [Lehman Brothers Aggregate]	10.25%
Cash equivalents [Salomon Brothers 90-Day T-Bill]	1.70%

Changes in Benefits Valued

Effective with the January 1,2003 valuation, all non-bargaining active participants of the Long Island Water Corporation Retiree Welfare Plan and the St. Louis County Water Company Retiree Welfare Plan and their associated obligations were transferred into the American Water Works Company, Inc. Retiree Welfare Plan.

FAS 106 Postretirement Welfare Cost and Funded Position

Postretirement welfare cost is the amount recognized in American **Water** Works' **financial** statement as the cost **of** postretirement welfare plans and is determined in accordance with Financial Accounting Standard No. 106. The fiscal 2003 postretirement welfare cost for **the** plan is $24,314,174, or **$6,226** per active participant.

Funded position, *on* a FAS 106 basis, is measured by comparing the fair value of assets (FV) with the accumulated postretirement benefit obligation **(APBO)**. The APBO is the portion of **the** total present value of projected benefits allocated to prior yews as of the measurement date.

The plan's funded percentage is 48.8% as of January 1,2003, based on the fair value of assets of $132,108,702 and an APBO of $270,629,183.

Change in Postretirement Welfare Cost and Funded Position

The postretirement welfare cost increased from $18,283,524 in fiscal 2002 to $24,314,174 in fiscal 2003 because:

- Expected changes based on prior year's assumptions, methods, plan provisions and contributions increased the postretirement welfare cost $323,713.
- Noninvestment experience and ***the** changes* in the claims experience **increased** the postretirement welfare cost **$1,816,772.**
- **The** return on the fair value of plan assets **was** (6.6)% in fiscal 2002, which increased the postretirement welfare cost $1,884,100.

  Assumption changes (decrease in discount rate; increase in after-tax rate of return) increased the postretirement welfare cost **$1,664,251.**

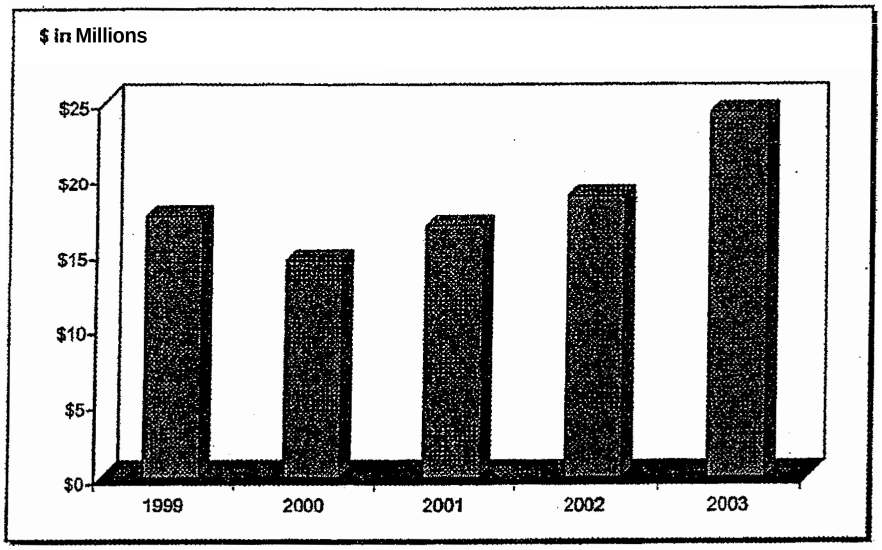
  The transfer of the non-bargaining active participants from Long Island and St. Louis increased the postretirement welfare *cost* $341,814.

The funded percentage **decreased** from 59.3% to 48.8% primarily due to the less than expected asset return and the decrease in discount rate.

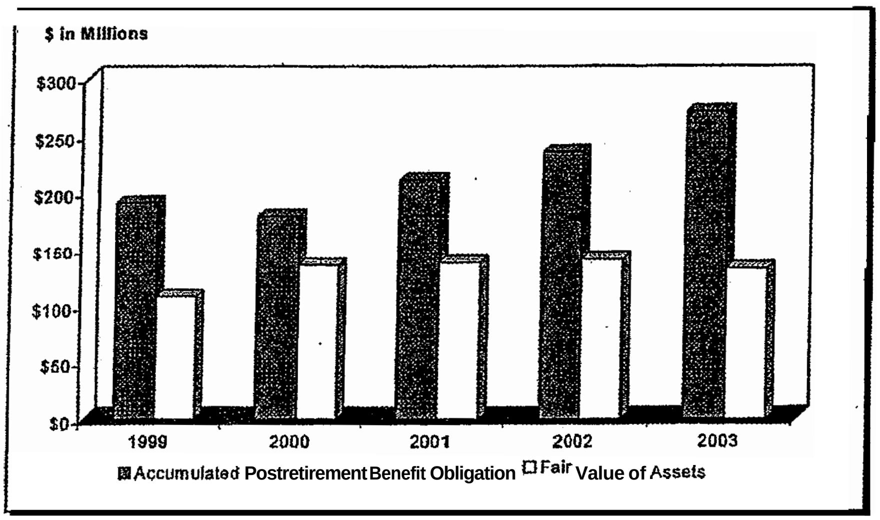
History of Postretirement Welfare Cost and Funded Position

The following charts show the history of the plan's postretirement welfare cost and funded position.

Postretirement Welfare Cost



Accumulated Postretirement Benefit Obligation and Fair Value of Assets



History of Postretirement Welfare Cost and APBO Funded Percentage

Fiscal year	Postretirement welfare cost	APBO	Fair value of assets	Discount rate
2003	$ 24,314,174	$270,629,183	$ 132,108,702	6.75%
2002	18,283,524	236,023,333	139,871,228	7.25
2001	16,847,667	210,614,803	137,452,719	7.50
2000	14,503,712	179,196,299	135,011,029	8.00
1999	17,429,797	190,990,974	108,118,333	6.75

Employer Contributions

Employer contributions are the amounts paid by American Water Works to provide for postretirement benefits, net of participant contributions. For 2002, employer contributions of $18,283,524 *were* equal to expected contributions of $18,283,524.

American Water Works' funding policy is to contribute an amount equal to the postretirement welfare accounting cost not to exceed the maximum tax-deductible limit. American Water Works may change its contribution if appropriate to its tax and cash position and the plan's funded position. For 2003, the contribution under the funding policy is $24,314,174. The maximum tax-deductible contribution limit under the Internal Revenue Code is estimated to be $39,391,000. Estimated benefit payments for 2003 are $1 *1,655,579.*

Actuarial Certification

American Water Works Company, Inc., retained Towers Perrin to perform a valuation of its postretirement welfare benefit plan for the purpose of determining (1) its postretirement welfare cost in accordance with FAS 106 and (2) the maximum tax-deductible contribution 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 the "General Qualification Standard for Public Statements of Actuarial Opinion" relating to the postretirement welfare 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 postretirement welfare cost have been selected by the plan sponsor, with the concurrence of Towers Perrin. FAS 106 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 reasonable assumptions.

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 Water Works and its auditors in connection with our actuarial valuation of the postretirement welfare plans. 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.

Cynthia C. King	Lauren F. Levine
Cynthia C. King, FSA, MAAA, EA	Lauren F. Levine, ASA, MAAA

Towers Perrin

November 2003

Supplemental Information

Asset Values

Asset Values for Calculating Postretirement Welfare Cost

Fair value, excluding contributions receivable:	
▸ As of January 1,2002	$ 139,871,228*
▸ Employer contributions	18,283,524
▸ Participant contributions	987,874
▸ Disbursements including expenses	(12,402,067)
▸ Investment return, net of taxes	(9,380,195)
▸ Aquarion Divestiture	(5,251,662)
▸ As of January 1,2003	$ 132,108,702
▸ Rate of retum	(6.6)%
Market-related value:	
▸ As of January 1,2002	$ 139,871,228*
▸ As of January 1, 2003	132,108,702
▸ Rate of return	(6.6)%

Asset Values for Calculating Employer Contributions

Actuarial value:	
▸ As of January 1,2002	$ 139,871,228*
As of January 1,2003	132,108,702
▸ Rate of retum	(6.6)%

* Includes $1,118,031 from Citizens acquisition.

Asset Values for Determining Employer Contributions — By Trust

	VEBA Bargaining Medical	VEBA Nonbargaining Medical	VEBA Life Insurance
Market value:			
• As of January 1, 2002	$ 111,845,641*	$ 14,581,446*	$ 13,444,141
• Total contributions	19,271,398	0	0
Disbursements	(5,462,846)	(5,273,555)	(1,665,666)
Investment return, net of taxes	(8,537,302)	161,232	(1,004,125)
• Aquarion Divestiture	(4,446,002)	(310,281)	(495,379)
• As of January 1, 2003	112,670,889	9,158,842	10,278,971
• Rate of return	(7.3)%	1.4%	(8.1)%
Actuarial value:			
• As of January 1,2002	$ 111,845,641*	$ 14,581,446*	$ 13,444,141
As of January 1,2003	112,670,889	9,158,842	10,278,971
Rate of return	(7.3)%	1.4%	(8.1)%

* Includes *Citizens* acquisition.

Basic Results for Postretirement Welfare Cost

	January 4,2003	January 1, 2002*
Service Cost		
Medical	$ 8,972,268	$ 7,777,945
Life insurance	155,923	137,313
Total	$ 9,128,191	$ 7,915,258
Accumulated Postretirement Benefit Obligation [APBO]		
Medical:		
▸ Current retirees	$ 102,481,162	$ 90,831,245
▸ Other participants fully eligible for benefits	5,491,308	5,177,525
▸ Other active participants	144,405,680	127,139,608
▸ Total	$ 252,378,150	$ 223,148,378
Life insurance:		
▸ Current retirees	$ 15,191,125	$ 9,714,948
▸ Other participants fully eligible for benefits	237,005	433,689
Other active participants	2,822,903	2,726,318
▸ Total	$ 18,251,033	$ 12,874,955
All benefits:		
▸ Current retirees	$ 117,672,287	$ 100,546,193
Other participants fully eligible for benefits	5,728,313	5,611,214
▸ Other active participants	147,228,583	129,865,926
Totai	$ 270,629,183	$ 236,023,333
Assets		
Fair value [FV]	$ 132,108,702	$ 139,871,228
Unrecognized investment losses (gains)	0	0
Market-related value	$ 132,108,702	$ 139,871,228

* includes Citizens acquisition.

	January 1, 2003	January *I, 2052*
Key Economic Assumptions		
Discount rate	6.75%	7.25%
Average compensation increase rate	4.75%	4.75%
Rate of return on assets, pre-tax	8.75%	9.00%
Assumed tax rate on VEBA assets*	38.00%	38.00%
Weighted average rate, after-tax	8.40%	8.30%
Health care cost trend rate, under age 65:		
First year	9.00%	10.00%
Ultimate	5.00%	5.00%
▸ Year ultimate reached	2007	2007
Health care cost trend rate, age 65 and over:		
First year	9.00%	10.00%
Ultimate	5.00%	5.00%
▸ Year ultimate reached	2007	2007

* Assumed to apply to 10% and 20% of assets expected to be invested in a taxable medical trust (for non-bargaining employees) for fiscal years beginning January 1, 2003 and January 1,2002, respectively.

Development of Prepaid (Accrued) Postretirement Benefit Cost as of December 31,2002

	Fiscal 2002
Prepaid (accrued) postretirement benefit cost as of December 31, 2001	$ (13,108,666)
Changes during fiscal 2002:	
Income (cost) recognized	(18,283,524)
Employer contributions	18,283,524
Net adjustments due to transfer of Long Island and St. Louis non-bargaining active participants and Aquarion divestiture	18,041
Prepaid (accrued) postretirement benefit cost as of December 31,2002	$ (13,090,625)

Reconciliation of Funded Status

	January 1, 2003	January 1, 2002
Funded status [FV − APBO]	$ (138,520,481)	$ (96,152,105)
Unrecognized transition obligation	54,495,446	59,671,588
Unrecognized net actuarial loss (gain)	70,934,410	23,371,851
Unrecognized prior service cost (credit)	0	0
Prepaid (accrued) postretirement benefit cost	$ (13,090,625)	$ (13,108,666)

Effect of Change in Health Care Cost Trend Rate

One-percentage-point Increase:		
Sum of service cost and interest cost	$ 4,767,438	$ 4,220,093
APBO	37,617,585	32,334,866
One-percentage-point decrease:		
Sum of service cost and interest cost	(3,820,439)	(3,403,423)
APBO	(30,811,381)	(26,600,636)

Postretirement Welfare Cost

	Fiscal 2003	Fiscal 2002
Postretirement Welfare Cost		
Service cost	$ 9,128,191	$ 7,915,258
Interest cost	18,496,670	17,325,722
Expected return on assets	(11,661,018)	(11,968,876)
Amortization:		
▸ Unrecognized transition obligation	5,449,545	5,440,564
▸ Unrecognized net loss (gain)	2,900,786	0
▸ Unrecognized prior service cost (credit)	0	0
Postretirement welfare cost prior to sale of New England operations	$ 24,314,174	$ 18,712,668
Adjustment for sale of New England Operations	N/A	(429,144)
Postretirement welfare cost after sale of New England operations	$ 24,314,174	$ 18,283,524
Per active participant	$ 6,226	$ 4,732

Change in Postretirement Welfare Cost

Postretirement welfare cost for fiscal 2002	$ 18,283,524
Change from fiscal 2002 to fiscal 2003:	
▸ Expected based on prior valuation	323,713
▸ Loss (gain) from noninvestment and claims experience	1,816,772
▸ Loss (gain) from asset experience	1,884,100
Assumption changes	1,664,251
• Long Island and St. Louis non-bargaining active participant transfers	341,814
Postretirement welfare cost for fiscal 2003	$ 24,314,174

Actuarial Present Value of Benefit Obligation for SOP 92-6

	December 31, 2002	December 31,2005
Actuarial Present Value of Benefit Obligation		
Participants currently receiving benefits	$ 117,672,287	$ 99,049,799
Other fully eligible participants	5,728,313	5,188,274
Other participants	147,228,583	129,865,926
Total	$ 270,629,183	$ 234,103,999*
Fair value of assets	132,108,702	138,753,197*
Effect on obligation of one-percentage-point increase in health care cost trend rate	37,617,585	31,285,048

Change in Actuarial Present Value of Benefit Obligation	
Actuarial present value of benefit obligation as of December 31,2001	$ 234,103,999
Change from 2001 to 2002:	
Additional benefits accumulated (including the effect of noninvestment experience)	11,680,086
Effect of time value of money	16,584,210
▸ Benefits paid	(10,903,328)
▸ Assumption changes	22,697,434
▸ Effect of Citizens acquisition and Aquarion divestiture	(5,675,488)
• Effect of Long Island and St. Louis non-bargaining active participant transfer	2,142,270
Changes in benefits valued	0
Actuarial present value of benefit obligation as of December 31,2002	$ 270,629,183

* Excludes the effect of the Citizens acquisition.

Change in Plan Assets

Fair value of plan assets as of December 31,2001:	$ 138,753,197
Actual return on plan assets	(9,380,195)
Employer contributions	18,283,524
Participant contributions	987,874
Disbursements	(12,402,067)
Effect of Aquarion divestiture and Citizens acquisition	(4,133,631)
Fair value of plan assets as of December 31,2002	$ 132,108,702

The key actuarial assumptions used for SOP 92-6 (as amended by SOP 01-2) calculations are the same as those used to determine the postretirement welfare cost and are shown in the Actuarial Assumptions and Methods section.

Basic Results for Employer Contributions

	January 9,2003	January 1,2002
Present Value of Projected Benefits		
Medical — Bargaining	$ 137,208,540	$ 133,589,911
Medical — Non-bargaining	95,492,578	84,195,145
Life Insurance	16,241,630	12,159,571
Total	$248,942,748	$ 229,944,627
Assets		
Medical — Bargaining:		
• Fair value	$ 112,670,889	$ 111,845,641
• Employer contributions receivable	0	0
Unrecognized investment losses (gains)	N/A	N/A
Actuarial value [AV]	112,670,889	111,845,641
Medical — Non-bargaining:		
▸ Fair value	$ 9,158,842	$ 14,581,446
Employer contributions receivable	0	0
• Unrecognized investment losses (gains)	N/A	N/A
Actuarial value [AV]	9,158,842	14,581,446
Life Insurance:		
▸ Fair value	$ 10,278,971	$ 13,444,141
• Employer contributions receivabte	0	0
• Unrecognized investment losses (gains)	N/A	N/A
• Actuarial value [AV]	10,278,971	13,444,141
Total:		
Fair value	$ 132,108,702	$ 139,871,228
• Employer contributions receivable	0	0
▸ Unrecognized investment losses (gains)	N/A	N/A
▸ Actuarial value [AV]	132,108,702	139,871,228

Key Economic Assumptions

Discount rate for present value of projected benefits*	8.50/5.25%
Assumed tax rate	38.00%
Average salary increase rate	4.75%
Health care cost trend rate:	
▸ First year	9.0%
Ultimate	5.0%
Year ultimate reached	2007

* Interest rate for life insurance VEBA and for bargaining medical VEBA is 8.5%. The 5.25% interest rate for the non-bargaining Medical VEBA is net of applicable taxes.

Estimated *Maximum* Tax-Deductible Employer Contribution — VEBA

	Non-bargaining VEBA	Life Insurance VEBA
Estimated Maximum Tax-Deductibfe Employer Contribution		
Qualified direct costs*	$ 5,898,000	$ 1,259,000
Permitted addition to qualified asset account**	11,730,000	1,359,000
Estimated investment income	(468,000)	(916,000)
Estimated participant contributions	(547.000)	(78,000)
Estimated maximum tax-deducfible employer contribution limit	$ 16,613,000	$ 1,624,000

* The estimated amount of benefits and expenses paid from the trust in the current year
** Normal cost plus change in incurred-but-unpaid claims reserve

Estimated Maximum Tax-Dcductibfe Employer Contribution — Bargaining VEBA	
Estimated present value of projected benefits at December 31,2003	$ 142,763,000
Estimated actuarial value of assets at December 31, 2003	(121,609,000)
Unfunded present value (minimum of $0)	$ 21,154,000
Estimated maximum fax-deductible contribution	$ 21,154,000

Notes:

- There is no minimum employer contribution to the trusts required by the IRS.
- Key employees and retirees who were key employees are not funded through the trusts and, therefore, are excluded from the calculations.
- To be tax-deductible in the indicated fiscal year, employer contributions must be made prior to the end of the fiscal year.
- The maximum tax-deductible contributions cannot be finalized until the end of the year.

Expected Benefits and Administrative Expenses

	January 1,2003	January 1,2002
Medical		
Gross disbursements	$ 11,702,036	$ 10,236,131
Participant contributions	1,202,421	960,875
Net disbursements	$ 10,499,615	$ 9,275,256
Life insurance		
Gross disbursements	$ 1,234,331	877,458
Participant contributions	78,367	49,703
Net disbursements	$ 1,155,964	$ 827,755
Total		
Gross disbursements	$ 12,936,367	$ 11,113,589
Participant contributions	1,280,788	1,010,578
Net disbursements	$ 11.655.579	$ 10,103,011

Actuarial Assumptions and Methods

	FAS 106 Cost	Employer Contributions
Economic Assumptions		
Discount rate:		
Pre-tax	6.75%	N/A
After-tax	N/A	8.5%/5.25%*
Return on plan assets, pre-tax	8.75%	
Effective tax rate on VEBA assets	38.00%	N/A
Weighted average rate of return, after-tax**	8.40%	N/A
Annual compensation increase rate {for projection of life insurance benefits)	Age-related rates, averaging **4.75%**	Age-related rates, averaging **4.75%**

- 5.25% interest rate is net of tax and is applicable to non-bargaining medical VEBA only.

** Assumes that 10% of assets will be invested in a taxable medical trust (for non-bargaining employees)

Medical Benefit Assumptions

Average per capita claims cost:*

Age	*Retiree*	***Dependent***
40–44	N/A	$4,004
45–49	N/A	4,525
50–54	N/A	5,246
55–59	$6,327	6,327
60–64	7,648	7,648
65–69	2,426	2,426
70–74	2,715	2,715
75–79	3,041	3,041
80–84	3,331	3,331
≥85	3,452	3,452

* Includes cost for **dental** coverage. Per capita costs for retirees 65 or older represent costs of Supplemental Plan net of Medicare benefits. Surviving dependent costs are assumed to equal retiree costs. Former PG&W employees are valued using the same average per capita claims costs as other American Water Works Company, Inc. retirees.

Administrative expenses	Included in per capita costs

	Postretirement Welfare Cost	Employer Contributions
Health care cost trend rate (covered charges):		
Medical costs under age 65	9.00% in 2003 reducing 1.00% per year for four years, reaching 5.00% in 2007 and after	Same*
▸ Medical costs age 65 and over	Same as under age 65	Same'
Medical plan trend rate:		
• Benefit costs under age 65	9.00% in 2003 reducing 1.00% per year for four years, reaching 5.00% in 2007 and after	Same*
▸ Benefit costs age 65 and over	Same as under age 65	Same*
Participant contribution trend rate	Same as applicable medical plan trend rate	Same*

* For setting contributions to the non-bargaining medical VEBA, no trend is assumed for the per capita costs and the retiree cost-sharing amounts.

Demographic and Other Assumptions

Mortality:

Healthy	1983 Group Annuity Mortality Table (male and female)
• Disabled	PBGC Disability Mortality Table
Termination	Rates varying by age

Representative rates:

Age	Rate
25	.060
35	.030
40	.020
45	.015
55	.000

Disability — 50% of 1987 CGDT, Rates varying by age and gender

Representative rates:

Age	Male	Female
25	.0004	.0006
35	.0006	.0012
40	.0010	.0015
45	.0018	.0023
55	.0059	.0053

Retirement — Rates vary by age, average age 62.

Age	Rate	Age	Rate	Age	Rate
55	.05	61	.04	67	.30
56	.02	62	.60	68	.30
57	.02	63	.40	69	.10
58	.02	64	.40	70	1.00
59	.02	65	.80		
60	.05	66	.10		

	Current Retirees	Future Retirees
Percent married	Based on valuation census data	90% of males; 60% of females
Spouses age	Based on valuation census data	Wife three years younger than husband
Participation	Based on valuation census data	100%

Methods

Postretirement welfare cost:

▸ Service cost and APBO	Projected unit credit actuarial cost method, allocated from the valuation date on or after date of hire to full eligibility date (age 62 or earlier retirement age)
▸ Market-related value of **assets**	Fair value as reported by company
▸ Development of claims cost	Average **medical** plan claims per person were developed based upon a review of **actual** claims experience for 1999, 2000, 2001 and nine **months** of 2002. The average claims costs were adjusted to reflect (i) medical trend (through the valuation date) and expenses, **(ii)** change from paid claims to incurred claims, **(iii)** differences in expected claims between the **medical** plans, **(iv)** plan design changes and **(v)** age-specific patterns expected based upon plan census information and standard claims distribution tables.

Employer contributions:

Normal cost and present value of projected benefits	Aggregate cost method for non-bargaining medical and life insurance VEBAs. For bargaining medical VEBA, the account limit is set equal to the present value of all future **benefits.**
▸ **Actuarial value** of assets	Fair value as reported by me trustee
• Development of claims cost	Same as for postretirement welfare cost

Benefits Not Valued

Postretirement welfare	None
Contributions	Benefits for key employees and life insurance benefits in excess of DEFRA limits (generally $50,000) were not valued.

Change in Methods and Assumptions Since Prior Valuation

Postretirement welfare	The discount rate for benefit obligations changed from 7.25% to 0.75%; the **rate of return on assets** was changed from **9.00%** to 8.75%; the assumed percentage of total retiree welfare assets expected to be invested in a taxable medical trust for non-bargaining **employees was changed from** 20% **to 10%.**
Employer contributions	None

Data Sources

Towers Perrin used asset data supplied by the trustee. The company furnished the claims cost data, as **well as the accrued postretirement benefits cost as of December 31, 2002. Data were reviewed for** reasonableness and consistency, but no audit was performed. 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, 2003	January 1, 2002
Active		
Number:		
▸ Fully eligible for benefits	67	73
▸ Other	3,838	3,791
Total	3,905*	3,864
Average age	46.1	45.9
Average past service	16.6	16.7
Average future service:		
To full eligibility age	14.667	14.833
▸ To expected retirement	15.124	15.258
Currently Receiving Benefits		
Retired participants and surviving spouses:		
▸ Number:		
– Underage 65	382	340
– Age 65 and over	1,440	1,640
– Total	1,822	1,980
▸ Average age	71.7	71.7
Dependents:		
▸ Number:		
– Underage65	351	365
– Age 65 and over	857	797
– Total	1,208	1,162
▸ Average age	70.3	69.8

* Includes all non-bargaining active participants of the Long Island Water Corporation Retiree Welfare Plan and the St. Louis County Water Company Retiree Welfare Plan.

Plan Provisions

Medical and Dental Benefits

Eligibility

Pension retirement or long-term disability.

Pension requirement: the first day of any month on which the employee elects to retire provided that:

(a) the employee has attained age 55, and

(b) the sum of the individual's age and years of service totals at least 70.

Employees hired on or after January 1,2002 are not eligible for these benefits.

Dependent eligibility

Spouse and unmarried children under age 19 or a fill-time student under age 23.

Survivor eligibility

Eligibility can continue for life provided that the survivor pays the full premium for coverage.

LTD requirement

10 years of service and on Social Security disability.

Retiree contributions (medical):

- **Retirees (except at Northwest Indiana, St. Louis and Long Island)**
  - *Basic*

<u>Under Age 65</u>: None for retirements prior to 1/1/96. The following schedule applies to those who retire on or after 1/1/96:

	Monthly Contribution	
Date	*Retiree*	*Dependent*
1/1/96	$0.00	$10.00
1/1/98	0.00	10.00
1/1/99	0.00	10.00
1/1/2000	0.00	10.00
1/1/2001	5.00	10.00
1/1/2002	7.50	20.00
1/1/2003	9.00	22.50

Age 65 and Over: None for retirements prior to 1/1/2000. The following **schedule** of monthly contributions **applies** to those who retire on or after January 1,2000.

	Monthly Contribution	
Date	***Retiree***	***Dependent***
1/1/2000	$5.00	$10.00
1/1/2001	10.00	20.00
1/1/2002	10.00	20.00
1/1/2003	10.00	20.00

– Additional

Under Age 65: For retirements on or after **8/1/93,** an additional contribution is required based on age at retirement. This contribution applies from **retirement** to **age *65.***

Age at	***Monthly Contribution***	
retirement	*Retiree*	*Dependent*
55	$100	None
56	90	None
57	80	None
58	70	None
59	60	None
60	50	None
61	**50**	None
***62* and later**	0	None

Age 65 and Over: None.

- Surviving dependents

Pays 100% of a budgeted premium. Premiums for 2003 are as follows:

Under Age 65: $324.00 **per month.**

Age 65 and Over: $260.00 per month.

- Disableds

Disabled employees pay the **dependent** coverage charge in effect at the time of disability. This charge is **not expected to increase** from **that** point. (For example, someone disabled in **2003** will **pay** $27.00 per month.)

- **Northwest Indiana** Retirees

Assumed to pay half of the cost of the plan.

St. Louis Retirees

Participant contributions **based** on age **plus** service as **of** January 1, 1993.

- Long Island Retirees

No participant contributions required.

Pre-65 benefits:

- Medical

	Out-of-Area Comprehensive Medical Plan	Managed Choice In-Network	Managed Choice Out-of-Network
Annual Deductible (single/family)	$150/300	None	$200/600
Out-of-Pocket Limit (single/family)	$1,000/3,000	$1,000/3,000	$3,000 per person
Lifetime Maximum	Unlimited	Unlimited	Unlimited
Office Visits	80% after ded.	100% after $15 copay	70%
Specialist Visits	80% after ded.	100% after $15 copay	70%
Hospital Inpatient	80% after ded.	90%	70% after ded.; $250 per adm.
Hospital Outpatient	80% after ded.	100%	70% after ded.
Prescription Drugs	Retail (30-day supply): 90% generic/80% brand name Mail: $5 generic/$15 brand name		

As of July 1,2001, the Comprehensive Plan for all current and future pre-65 retirees is no longer available. All pre-65 retirees are covered under the Managed Choice Plan unless they reside out of the service area. If they reside out of the service area, they are covered under the out-of-area comprehensive option.

- Dental Plan

Deductible (single/family)	$50/100
Preventive	100%, no ded.
Restorative and Major	80% after ded.
Calendar Year Maximum	$1,000
Orthodontia*	50% after ded.

* $1,500 lifetime maximum

Post-65 benefits	Medicare Supplement Plan (MSP) coordinated with Medicare on a modified exclusion basis. Specifically, MSP will cover the following: — Medicare Part **A** deductible. — 80% of reasonable and customary medical/surgical charges ***not*** covered by Medicare Part B including; but not limited to, the following: – Part B deductibles and coinsurance – Outpatient hospital expenses – Inpatient hospital expenses not covered by Medicare. – Covered surgical expenses Prescription drugs are covered through a card plan, which pays expenses at 80% for brand name **and** 90% for generic. A **separate annual $150 deductible applies before MSP will** coordinate with Medicare. Effective December 31,2001, Medicare **HMO** options are no longer offered at designated locations to retirees residing in Pennsylvania and New Jersey.

Life Insurance Benefits (Basic, Optional and Supplemental)

Eligibility:

► **Basic**	**Same as medical** plan.
Optional	Available only to participants who choose coverage prior to January 1, 1996; otherwise same as medical plan.
► Supplemental	Available only to certain executives, otherwise same as medical plan. American Water retirees prior to January 1,1997 retain thdr **prior plan provisions.**
Dependent eligibility	None.

Retiree contributions:

► Basic	None.
Optional	$8.40 per $1,000.
► Supplemental	$6.00 per $**1.000.**

Benefits:

▸ Basic	**For retirements prior** to 2003: 1x salary (excluding overtime) at retirement (rounded up to the next higher $1,000) to maximum of $50,000. Except for disabled employees, reduced 10% per year, beginning at earlier of first anniversary of retirement or age 66, to a minimum of 50% after 5 years. For retirements after 2002: $10,000.
• Optional	.5 x or 1x salary scheduled amount at retirement to maximum of $40,000. Except for disabled employees, reduced 10% per year, beginning at earliest of first anniversary of retirement or age 66, to a minimum of 50% after 5 years.
▸ **Supplemental**	Up to 2x salary at retirement to maximum of $80,000. Except for disabled employees, reduced 10% per year, beginning at earliest of first anniversary of retirement or age 66, to a minimum of 50% after 5 years.

Changes in Plan Provisions

Effective with the January 1,2003 valuation, all non-bargaining active participants of the Long Island Water Corporation Retiree Welfare Plan and the St. Louis County Water Company Retiree Welfare Plan and their associated obligations were transferred into the American Water Works Company, Inc. Retiree Welfare Plan.

Kentucky-American Water Company
Forecasted Group Insurance Expense Data Base
FOR THE TWELVE MONTHS ENDED: NOVEMBER 30, 2005

Object.Sub	BU	Description	NARUC Acct	December 2004 Forecast	January 2005 Forecast	February 2005 Forecast	March 2005 Forecast	April 2005 Forecast	May 2005 Forecast	June 2005 Forecast	July 2005 Forecast	August 2005 Forecast	September 2005 Forecast	October 2005 Forecast	November 2005 Forecast		AWW	Total Forecast
504100.16	120118	Group Ins Oper AG	926110	62,879	83,487	81,593	76,099	80,530	80,518	75,709	80,574	80,467	75,409	80,262	80,116	14	926110	937,643
[redacted]																		
505100.16	120118	PBOP Oper AG	926100	62,284	67,889	67,889	67,889	67,889	67,889	67,889	67,889	67,889	67,889	67,889	67,889	14	926100	809,063

	1,782,908
Less Business Development	36,202
	1,746,706

Calculation:

2004 Cost 904,277 ÷ 12 × 1 = 75,364

X1.09

2005 Cost 985662 ÷ 12 × 11 = 903,523

978,887

Capitalization Rate × .82651

809060

American Water
Preliminary Allocation Percentages of 2004 FAS 106 Cost and Retiree Contributions 04/14/04
Retiree Welfare Plan: Annual Valuation
Using data collected as of July 1, 2003

COMPANY	Total: Actives	Dependents of Actives *	Retireds and Disableds	Dependents of Retireds and Disableds	Surviving Spouses	Total Participants	FAS 106 Cost Allocation %**	Allocation of FAS 106 Cost	Contributions Allocation %***	Allocation of Expected Retiree Contributions
AMERICAN WATER WORKS COMPANY	7	5	3	2		17	0.16%	50,064	0.14%	2,400
AMERICAN WATER SERVICES (AAET, LP.)	23	20	12	7	3	65	0.60%	187,739	0.63%	10,801
AMERICAN WATER SERVICES (Corp)	5	5	8	8	-	26	0.24%	75,096	0.46%	7,886
AMERICAN WATER RESOURCES			1	1	-	2	0.02%	6,258	0.06%	1,029
AWW SERVICE COMPANY										
Voorhees	134	104	93	71	22	424	3.88%	1,214,047	5.31%	91,034
Belleville, IL Lab (R)	35	24	1	-	-	60	0.55%	172,094	0.03%	514
Hershey, PA Data Center (W)	33	27	6	3	-	69	0.63%	197,126	0.26%	4,457
New England (K)			1	1	-	2	0.02%	6,258	0.06%	1,029
Richmond, IN Data Center (H)	2	2	3	2	-	9	0.08%	25,032	0.14%	2,400
Western (L)	17	13	2	1	-	33	0.30%	93,870	0.09%	1,543
Haddon Heights IS	14	11		-	-	25	0.23%	71,987	0.00%	0
Northeast Region	14	11	1	1	-	27	0.25%	78,225	0.06%	1,029
Southeast Region	28	23	1.	-	-	52	0.48%	150,191	0.03%	514
Indiana Region	12	10	1	1	-	24	0.22%	68,838	0.06%	1,029
Illinois Region	25	17		-	-	42	0.38%	118,902	0.00%	0
Alton. IL Call Center	25	20	-	-	-	45	0.41%	128,288	0.00%	0
Shared Services	110	78	1	1	-	190	1.74%	544,444	0.06%	1,029
Total AWWS	449	340	110	81	22	1,002	9.17%	2,869,282	6.10%	104,578
CALIFORNIA - AM	143	123	68	60	10	404	3.70%	1,157,725	3.94%	67,547
HAWAII - AM	19	17				36	0.33%	103,257	0.00%	0
ILLINOIS - AM	282	236	187	138	23	866	7.93%	2,481,287	9.94%	170,410
INDIANA - AM	347	288	115	87	22	859	7.87%	2,462,513	6.40%	109,721
IOWA - AM	62	52	34	31	9	188	1.72%	538,186	2.11%	36,173
KENTUCKY - AM	134	109	-37	30	5	315	2.89%	904,277	2.06%	35,316
LONG ISLAND	30	25				55	0.50%	156,449	0.00%	0
MARYLAND - AM	9	8	11	11		39	0.36%	112,644	0.63%	10,801
MICHIGAN - AM	6	5	4	2		17	0.16%	50,064	0.17%	2,914
MISSOURI - AM	503	429	217	182	97	1,428	13.08%	4,092,715	14.17%	242,927
NEW JERSEY - AM	456	384	198	145	28	1,211	11.09%	3,470,047	10.60%	181,725
NEW MEXICO - AM	22	18	7	7	1	55	0.50%	156,449	0.43%	7,372
OHIO - AM	72	60	33	31	9	205	1.88%	588,250	2.09%	35,831
ARIZONA - AM	9	8	5	5	1	28	0.26%	81,354	0.31%	5,315
PENNSYLVANIA - AM	956	804	478	362	55	2,655	24.32%	7,609,697	25.56%	438,195
TENNESSEE - AM	120	94	59	48	10	331	3.03%	948,083	3.34%	57,260
VIRGINIA - AM - EASTERN DISTRICT	7	6				13	0.12%	37,548	0.00%	0
VIRGINIA - AM	77	65	33	28	10	213	1.95%	610,153	2.03%	34,802
WEST VIRGINIA - AM	313	265	152	133	24	887	8.12%	2,540,738	8.83%	151,380
TOTAL SYSTEM	4,052	3,366	1,772	1,399	329	10,917	100.00%	$31,289,675	100.00%	$1,714,383

* Based on assumption that 90% of active males and 60% of active females will be married at retirement.

** The allocation percentage for each company is equal to the ratio of total participants for that company to total participants for the entire American system.

*** The allocation percentage for retiree contributions is equal to the ratio of total inactive participants for that company to total inactive participants for the entire American system

Assumptions

Please note that these estimates are based on the same basic economic assumptions as were used in the December 31, 2003 disclosure, as follows:

- Discount rate: 6.25% per year (6.75% for 2002)
- Expected annual return on assets: 8.75% for pension; 8.40% for other postretirement benefits
- Rate of annual compensation increase: 4.75%, on average
- Health care cost trend rate (as specified by AW):

Year	Trend
2004	10.0%
2005	9.0%
2006	8.0%
2007	7.0%
2008	6.0%
2009+	5.0%

The health care cost trend rate increased from an initial rate in 2004 of 8% to 10%. The ultimate rate remains at 5%