

The Water and Power Employees'
Retirement Plan of the City of Los Angeles
Insured Lives Death Benefit Fund for
Noncontributing Members

GASB Actuarial Valuation and Review as of July 1, 2013

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December 5, 2013

Board of Administration The Water and Power Employees' Retirement Plan of the City of Los Angeles 111 North Hope Street, Room 357 Los Angeles, California 90012

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review of the Insured Lives Death Benefit Fund for Noncontributing Members as of July 1, 2013. It summarizes the actuarial data used in the valuation and establishes the Governmental Accounting Standards Board (GASB) reporting requirements for fiscal 2013-2014.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. The census and financial information on which our calculations were based was prepared by the Retirement Office. That assistance is gratefully acknowledged.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of John Monroe, ASA, MAAA, Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:

Paul Angelo, FSA, MAAA, EA Senior Vice President and Actuary John Monroe, ASA, MAAA, EA

Vice President and Associate Actuary

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SECTION 1

| VALUATION SUMMAR | ۷ | 1 | A | LI | U | A. | TI | O | N | SL | JΝ | ИN | Л | A | R | 1 | ١ |
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|------------------|---|---|---|----|---|----|----|---|---|----|----|----|---|---|---|---|---|

| Purposei |
|---------------------------------|
| Significant Issues in Valuation |
| Yeari |
| Summary of Key Valuation |
| Resultsii |

SECTION 2

EXHIBIT E

SUPPLEMENTAL INFORMATION

| EXHIBIT A |
|---------------------------------|
| Table of Fund Coverage |
| EXHIBIT B |
| Members in Active Service as of |
| June 30, 2013 By Age, Years of |
| Service, and Average |
| Compensation |
| EXHIBIT C |
| Table of Financial Information |
| EXHIBIT D |
| Development of the Fund |

Through June 30, 20134

Definitions of Pension Terms......5

SECTION 3

REPORTING INFORMATION

| Information Required by the |
|---------------------------------|
| GASB |
| EXHIBIT I |
| Summary of Actuarial Valuation |
| Results |
| EXHIBIT II |
| Table of Amortization |
| Bases10 |
| EXHIBIT III |
| Supplementary Information |
| Required by the GASB – |
| Schedule of Employer |
| Contributions1 |
| EXHIBIT IV |
| Supplementary Information |
| Required by the GASB – |
| Schedule of Funding Progress 12 |
| EXHIBIT V |
| Supplementary Information |
| Required by the GASB13 |
| EXHIBIT VI |
| Development of the Net Pension |
| Obligation and the Annual |
| Pension Cost Pursuant to |
| GASB 2714 |
| EXHIBIT VII |
| Actuarial Assumptions and |
| Methods15 |
| EXHIBIT VIII |
| Summary of Plan Provisions19 |
| |



Purpose

This report has been prepared by Segal Consulting to present a valuation of the Insured Lives Death Benefit Fund for Noncontributing Members (Fund) of The Water and Power Employees' Retirement Plan of the City of Los Angeles as of July 1, 2013. The principal purpose of this report is to document the calculation of various information required by the Governmental Accounting Standards Board (GASB). The results presented in this report are based on:

- > The benefit provisions of the Fund, as administered by the Board;
- The characteristics of covered active members, inactive vested members, retired and disabled members as of March 31, 2013, provided by the Retirement Office;
- > The assets of the Fund as of June 30, 2013, provided by the Retirement Office;
- > Economic assumptions regarding future salary increases and investment earnings; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

- > The net assets allocated to the Fund earned a return of -2.5% for the July 1, 2012 to June 30, 2013 plan year. This resulted in an actuarial loss of \$0.8 million when measured against the assumed rate of return of 5.00%; however, this actuarial loss caused only a slight increase in the Fund's Annual Required Contribution (ARC).
- > As of July 1, 2013, the Fund's actuarial accrued liability is \$96.8 million. Fund assets are \$10.4 million and therefore the unfunded actuarial accrued liability (UAAL) is \$86.4 million.
- > The components of the ARC for the 2013-2014 plan year are the Fund's normal cost of \$1.6 million; the total of the 15-year UAAL amortization layer payments, which is \$10.7 million; and interest on each of the above for one-half year (2.5%). The total ARC for the 2013-2014 plan year is \$12.6 million, which is 1.40% of the projected covered payroll of \$900.3 million. The ARC for the 2013-2014 plan year increased by \$0.7 million from the previous year. This increase was mainly due to actual contributions for 2012-2013 being less than the ARC.
- > The expected Department contributions for 2013-2014, reflecting the average recommended contribution rate of \$1.31 per \$100 of retirement benefit, are \$4.9 million. The Annual Pension Cost of \$11.1 million exceeds the expected Department contributions by \$6.2 million.
- The Governmental Accounting Standards Board (GASB) approved two new Statements affecting the reporting of pension liabilities for accounting purposes. Because these new Statements are not effective until the fiscal year ending June 30, 2014 for Plan reporting and the fiscal year ending June 30, 2015 for employer reporting, the financial reporting information in this report continues to be in accordance with Statements 25 and 27.
- The Board may want to authorize a review of the assumptions, funding methods and reserving policies for this Fund.

- Ref: Pg. 4
- *Ref: Pg.* 8
- Ref: Pg. 9
- Ref: Pg. 14

SECTION 1: Valuation Summary for the Insured Lives Death Benefit Fund for Noncontributing Members of The Water and Power Employees' Retirement Plan of the City of Los Angeles

| | 2013 | 2012 |
|--|---------------|---------------|
| Funding elements for plan year beginning July 1: | | |
| Total normal cost | \$1,584,909 | \$1,551,788 |
| Market value of assets | 10,446,743 | 10,358,504 |
| Actuarial value of assets | 10,446,743 | 10,358,504 |
| Actuarial accrued liability | 96,808,939 | 95,907,085 |
| Unfunded actuarial accrued liability | 86,362,196 | 85,548,581 |
| Funded ratio | 10.8% | 10.8% |
| GASB 25/27 for plan year beginning July 1: | | |
| Annual pension cost | \$11,114,702 | \$10,679,472 |
| Actual contributions | | 5,021,181 |
| Percentage contributed | | 47.0% |
| Covered payroll* | \$900,254,454 | \$817,421,028 |
| Demographic data for plan year beginning July 1: | | |
| Number of retired members | 6,495 | 6,458 |
| Number of vested former members** | 780 | 851 |
| Number of active members | 8,913 | 8,962 |
| Total projected compensation | \$900,254,454 | \$886,539,366 |
| Average projected compensation | \$101,005 | \$98,922 |

^{*} For 2012, this represents the actual covered payroll for 2012-2013 as reported by the Retirement Office.

^{**} Excludes terminated members with less than five years of service.

SECTION 2: Supplemental Information for the Insured Lives Death Benefit Fund for Noncontributing Members of The Water and Power Employees' Retirement Plan of the City of Los Angeles

EXHIBIT A

Table of Fund Coverage

| | Year End | | |
|---|---------------|---------------|---------------------------|
| Category | 2013 | 2012 | Change From Prior Year |
| Active members in valuation: | | | |
| Number | 8,913 | 8,962 | -0.5% |
| Average age | 49.3 | 48.9 | N/A |
| Average service | 18.4 | 18.2 | N/A |
| Projected total compensation | \$900,254,454 | \$886,539,366 | 1.5% |
| Projected Average compensation | \$101,005 | \$98,922 | 2.1% |
| Vested terminated members* | | | |
| Number | 780 | 851 | -8.3% |
| Average age | 52.8 | 51.9 | N/A |
| Retired members: | | | |
| Number in pay status | 6,495 | 6,458 | 0.6% |
| Average age | 73.3 | 73.3 | N/A |
| Average monthly Retirement Plan benefit | \$4,844 | \$4,654 | 4.1% |

^{*} Excludes terminated members with less than five years of service.



SECTION 2: Supplemental Information for the Insured Lives Death Benefit Fund for Noncontributing Members of The Water and Power Employees' Retirement Plan of the City of Los Angeles

EXHIBIT B

Members in Active Service as of June 30, 2013

By Age, Years of Service, and Average Compensation

| | | Years of Service | | | | | | | | | | |
|-----------|-----------|------------------|----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|--|--|
| Age | Total | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 & over | | |
| Under 25 | 29 | 29 | | | | | | | | | | |
| | \$88,614 | \$88,614 | | | | | | | | | | |
| 25 - 29 | 249 | 144 | 104 | 1 | | | | | | | | |
| | 95,512 | 94,824 | \$96,247 | \$118,078 | | | | | | | | |
| 30 - 34 | 616 | 171 | 311 | 128 | 6 | | | | | | | |
| | 97,887 | 92,640 | 98,716 | 102,979 | \$95,840 | | | | | | | |
| 35 - 39 | 799 | 117 | 302 | 322 | 58 | | | | | | | |
| | 94,219 | 88,122 | 92,685 | 98,379 | 91,413 | | | | | | | |
| 40 - 44 | 1,087 | 83 | 289 | 401 | 178 | 132 | 4 | | | | | |
| | 95,026 | 91,266 | 90,072 | 92,774 | 98,205 | \$110,971 | \$89,226 | | | | | |
| 45 - 49 | 1,565 | 78 | 199 | 306 | 178 | 479 | 320 | 5 | | | | |
| | 102,669 | 90,733 | 89,147 | 93,198 | 101,457 | 112,939 | 108,321 | \$104,117 | | | | |
| 50 - 54 | 1,954 | 60 | 158 | 248 | 142 | 374 | 631 | 325 | 16 | | | |
| | 104,499 | 91,641 | 87,582 | 92,660 | 93,851 | 103,577 | 111,151 | 116,562 | \$111,957 | | | |
| 55 - 59 | 1,464 | 42 | 96 | 163 | 88 | 229 | 405 | 339 | 101 | 1 | | |
| | 106,383 | 97,621 | 90,562 | 89,706 | 95,022 | 106,494 | 108,061 | 119,355 | 111,554 | \$86,690 | | |
| 60 - 64 | 786 | 23 | 38 | 79 | 53 | 124 | 206 | 139 | 94 | 30 | | |
| | 100,323 | 83,083 | 85,557 | 87,606 | 98,120 | 97,991 | 102,751 | 104,963 | 109,789 | 111,426 | | |
| 65 - 69 | 264 | 3 | 10 | 33 | 16 | 42 | 68 | 49 | 25 | 18 | | |
| | 100,004 | 62,674 | 83,497 | 90,508 | 94,103 | 93,374 | 104,916 | 106,037 | 103,608 | 113,538 | | |
| 70 & over | 100 | 2 | 4 | 7 | 7 | 15 | 27 | 13 | 7 | 18 | | |
| | 91,621 | 55,463 | 51,611 | 78,289 | 97,771 | 98,264 | 87,209 | 96,914 | 95,267 | 103,166 | | |
| Total | 8,913 | 752 | 1,511 | 1,688 | 726 | 1,395 | 1,661 | 870 | 243 | 67 | | |
| | \$101,005 | \$91,538 | \$92,189 | \$94,049 | \$97,102 | \$107,109 | \$108,113 | \$114,839 | \$109,611 | \$109,405 | | |



EXHIBIT C
Table of Financial Information

| Statement of Death Benefit Fund Assets | Year Ended June 30, 2013 | Year Ended June 30, 2012 |
|---|-----------------------------|-----------------------------|
| Cash | \$919,762 | \$1,031,942 |
| Accounts receivable | 880,475 | 984,720 |
| Investment in bonds and mortgage-backed securities at fair value | 26,208,830 | 24,719,737 |
| Short-term commercial paper, amortized cost which approximates market | <u>717,742</u> | <u>1,016,499</u> |
| Total Assets | \$28,726,809 | \$27,752,898 |
| Accounts payable | (797,534) | (518,896) |
| Death claims in process-insured lives | (2,909,143) | (2,477,449) |
| Net Assets at Market Value | \$25,020,132 | \$24,756,553 |
| Less: Unrealized Appreciation/(Depreciation), included in the above | <u>2,220,076</u> | <u>2,698,586</u> |
| Total Reserves and Designated Balances | \$22,800,056 | \$22,057,967 |
| Allocation of Net Assets to Insured Lives Death Benefit Fund for Noncontributing Members | Year Ended June 30, 2013 | Year Ended June 30, 2012 |
| Net Assets at Market Value | \$25,020,132 | \$24,756,553 |
| 2. General Reserves | | |
| a. Reserve for Benefits Granted: | | |
| i. Family Death Benefits | \$3,852,072 | \$4,053,861 |
| ii. Supplemental Family Death Benefits | <u>450,959</u> | <u>191,065</u> |
| iii. Total for Benefits Granted | \$4,303,031 | \$4,244,926 |
| b. Contribution Accounts: | | |
| i. Family Death Benefits | \$1,429,131 | \$1,695,783 |
| ii. Supplemental Family Death Benefits | <u>5,387,702</u> | <u>5,399,935</u> |
| iii. Total for Contribution Accounts | \$6,816,833 | \$7,095,718 |
| c. Total General Reserve for Family and Supplemental Family Death Benefits | \$11,119,864 | \$11,340,644 |
| 3. Insured Lives General Reserve for Contributing Members (Mean Funds) | 3,453,525 | 3,057,405 |
| 4. Net Assets for Insured Lives Death Benefit Fund for Noncontributing Members = $(1) - (2c) - (3)^*$ | \$10,446,743 | \$10,358,504 |

General Reserve for Noncontributing Members is \$8,226,667 at June 30, 2013 and \$7,659,918 at June 30, 2012.



SECTION 2: Supplemental Information for the Insured Lives Death Benefit Fund for Noncontributing Members of The Water and Power Employees' Retirement Plan of the City of Los Angeles

EXHIBIT D

Development of the Fund Through June 30, 2013

| Year Ended June 30 | Employer Contributions | Benefit Payments | Net Investment Return | Assets at End of Year | Average Assets During Year | Rate of Return |
|-----------------------|---------------------------|---------------------|--------------------------|--------------------------|-------------------------------|-------------------|
| 2006 | - | - | - | \$7,049,552 | - | - |
| 2007 | \$3,671,046 | \$4,828,038 | \$636,402 | 6,528,962 | \$6,471,056 | 9.83% |
| 2008 | 3,825,394 | 5,633,430 | 11,152 | 4,732,078 | 5,624,944 | 0.20% |
| 2009 | 4,445,208 | 4,650,282 | 734,532 | 5,261,536 | 4,629,541 | 15.87% |
| 2010 | 5,133,632 | 4,811,131 | 1,602,934 | 7,186,971 | 5,422,787 | 29.56% |
| 2011 | 5,552,771 | 5,360,830 | 894,351 | 8,273,263 | 7,282,942 | 12.28% |
| 2012 | 5,001,416 | 4,555,657 | 1,639,482 | 10,358,504 | 8,496,143 | 19.30% |
| 2013 | 5,021,181 | 4,666,084 | (266,858) | 10,446,743 | 10,536,053 | -2.53% |



EXHIBIT E

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions:

The estimates on which the cost of the Fund is calculated including:

- (a) <u>Investment return</u> the rate of investment yield that the Fund will earn over the long-term future;
- (b) <u>Mortality rates</u> the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) <u>Retirement rates</u> the rate or probability of retirement at a given age;
- (d) <u>Turnover rates</u> the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost:

The amount of contributions required to fund the level cost allocated to the current year of service.

Actuarial Accrued Liability

For Actives:

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability

For Pensioners:

The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability:

The extent that the actuarial accrued liability of the Fund exceeds the assets of the Fund.



Amortization of the Unfunded Actuarial Accrued Liability:

Payments made over a period of years equal in value to the Fund's unfunded actuarial

accrued liability.

Investment Return: The rate of earnings of the Fund from its investments, including interest, dividends

and capital gain and loss adjustments, computed as a percentage of the average value

of the Fund.



INFORMATION REQUIRED BY THE GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to the GASB is the historical comparison of the GASB required contribution to the actual contributions. This comparison demonstrates whether a plan is being funded within the range of the GASB reporting requirements.

The other critical piece of information regarding the Fund's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the plan as calculated under the GASB. High ratios indicate a well-funded plan with assets sufficient to cover the Fund's accrued liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors.

The details regarding the calculations of these values and other GASB numbers may be found in this Section 3.



| EX | (HIBIT I | | |
|----|--|--------------|--------------|
| Su | ımmary of Actuarial Valuation Results | | |
| Th | ne valuation was made with respect to the following data supplied to us: | | |
| 1. | Retired members as of the valuation date | | 6,495 |
| 2. | Members inactive during year ended June 30, 2013 with vested rights* | | 780 |
| 3. | Members active during the year ended June 30, 2013 | | 8,913 |
| Th | ne actuarial factors as of the valuation date are as follows: | | |
| 1. | Normal cost | | \$1,584,909 |
| 2. | Present value of future benefits | | 110,083,855 |
| 3. | Present value of future normal costs | | 13,274,916 |
| 4. | Actuarial accrued liability | | \$96,808,939 |
| | Retired members | \$69,750,415 | |
| | Inactive members with vested rights* | 3,905,288 | |
| | Active members | 23,153,236 | |
| 5. | Actuarial value of assets | | \$10,446,743 |
| 6. | Unfunded actuarial accrued liability | | \$86,362,196 |

^{*} Excludes terminated members with less than five years of service.



EXHIBIT I (continued)

Summary of Actuarial Valuation Results

| The determination of the Annual Required Contribution is as follows: | Dollar Amount | % of Payroll |
|--|----------------------|--------------|
| Total normal cost | \$1,584,909 | 0.18% |
| 2. Expected employee contributions | 0 | 0.00% |
| 3. Employer normal cost: (1) + (2) | \$1,584,909 | 0.18% |
| 4. Amortization of unfunded actuarial accrued liability | 10,668,711 | 1.19% |
| 5. Total Annual Required Contribution (ARC): (3) + (4), adjusted for timing* | 12,559,961 | 1.40% |
| 6. Projected payroll | \$900,254,454 | |

^{*} Annual Required Contribution is assumed to be paid at the middle of every year.



EXHIBIT II

Table of Amortization Bases

| Туре | Date Established | Initial Years | Initial Amount | Annual Payment* | Years Remaining | Outstanding Balance |
|--------------------|---------------------|------------------|-------------------|--------------------|--------------------|------------------------|
| Initial UAAL | 07/01/2007 | 15 | \$72,495,279 | \$6,651,773 | 9.00 | \$49,643,592 |
| Actuarial Loss | 07/01/2008 | 15 | 20,577,353 | 1,888,066 | 10.00 | 15,308,101 |
| Actuarial Loss | 07/01/2009 | 15 | 4,809,233 | 441,269 | 11.00 | 3,848,632 |
| Actuarial Loss | 07/01/2010 | 15 | 6,203,070 | 569,160 | 12.00 | 5,296,838 |
| Assumption Changes | 07/01/2010 | 15 | (6,329,269) | (580,739) | 12.00 | (5,404,602) |
| Actuarial Loss | 07/01/2011 | 15 | 6,536,049 | 599,712 | 13.00 | 5,915,114 |
| Actuarial Loss | 07/01/2012 | 15 | 4,924,411 | 451,837 | 14.00 | 4,696,203 |
| Actuarial Loss | 07/01/2013 | 15 | 7,058,318 | 647,633 | 15.00 | 7,058,318 |
| Total | | | | \$10,668,711 | | \$86,362,196 |

^{*} Level dollar amount.



SECTION 3: Reporting Information for the Insured Lives Death Benefit Fund for Noncontributing Members of The Water and Power Employees' Retirement Plan of the City of Los Angeles

EXHIBIT III

Supplementary Information Required by the GASB – Schedule of Employer Contributions

| Plan Year Ended June 30 | Annual Required Contributions | Annual Pension Cost | Actual Contributions | Actual Contributions/ Annual Required Contributions | Actual Contributions/ Annual Pension Cost |
|----------------------------|----------------------------------|------------------------|-------------------------|--|--|
| 2009 | \$10,084,010 | \$9,846,797 | \$4,445,208 | 44.1% | 45.1% |
| 2010 | 10,708,915 | 10,221,070 | 5,133,632 | 47.9% | 50.2% |
| 2011 | 10,717,090 | 9,993,189 | 5,552,771 | 51.8% | 55.6% |
| 2012 | 11,379,225 | 10,449,289 | 5,001,416 | 44.0% | 47.9% |
| 2013 | 11,862,188 | 10,679,472 | 5,021,181 | 42.3% | 47.0% |
| 2014 | 12,559,961 | 11,114,702 | | | |



SECTION 3: Reporting Information for the Insured Lives Death Benefit Fund for Noncontributing Members of The Water and Power Employees' Retirement Plan of the City of Los Angeles

EXHIBIT IV

Supplementary Information Required by the GASB – Schedule of Funding Progress

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded/ (Overfunded) AAL (UAAL) (b) - (a) | Funded Ratio (a) / (b) | Projected Covered Payroll (c) | UAAL as a Percentage of Covered Payroll* [(b) - (a)] / (c) |
|--------------------------------|--|--|---|------------------------------|--|--|
| 07/01/2008 | \$4,732,078 | \$94,445,113 | \$89,713,035 | 5.01% | \$708,731,840 | 12.66% |
| 07/01/2009 | 5,261,536 | 95,302,626 | 90,041,090 | 5.52% | 805,137,795 | 11.18% |
| 07/01/2010 | 7,186,971 | 92,173,753 | 84,986,782 | 7.80% | 856,089,559 | 9.93% |
| 07/01/2011 | 8,273,263 | 94,627,428 | 86,354,165 | 8.74% | 870,203,423 | 9.92% |
| 07/01/2012 | 10,358,504 | 95,907,085 | 85,548,581 | 10.80% | 886,539,366 | 9.65% |
| 07/01/2013 | 10,446,743 | 96,808,939 | 86,362,196 | 10.79% | 900,254,454 | 9.59% |

^{*} Not less than zero.



Supplementary Information Required by the GASB Valuation date July 1, 2013 Actuarial cost method Entry Age Cost Method Amortization method Level dollar amortization The July 1, 2007 Unfunded Actuarial Accrued Liability is amortized over a closed 15-year Remaining amortization period period commencing July 1, 2007. Any subsequent changes in Unfunded Actuarial Accrued Liability are amortized over separate closed 15-year periods effective with that valuation. Total market value of the Death Benefit Fund at valuation date, less the Reserves for Benefits Asset valuation method Granted and Contribution Accounts for the Family Death Benefit and Supplemental Family Death Benefit, and the Insured Lives General Reserve for Contributing Members (Mean Funds). **Actuarial assumptions:** Investment rate of return 5.00%

3.50%

6,495

8,913

16,188

780

5.35% to 10.50%*

3.00% (actual increases are contingent upon CPI increases with a 3.00% maximum)

EXHIBIT V

Inflation rate

Plan membership: Retired members

Active members

Total

Projected salary increases Cost of living adjustments

Terminated vested members**



^{*} Includes inflation at 3.50%, "across the board" increases of 0.75% plus merit and promotional increases. See Exhibit VII for these increases.

^{**} Excludes terminated members with less than five years of service.

SECTION 3: Reporting Information for the Insured Lives Death Benefit Fund for Noncontributing Members of The Water and Power Employees' Retirement Plan of the City of Los Angeles

EXHIBIT VI

Development of the Net Pension Obligation and the Annual Pension Cost Pursuant to GASB 27

| Plan Year Ended June 30 | Employer Annual Required Contribution (a) | Employer Amount Contributed (b) | Interest on NPO (c) | ARC Adjustment (h) / (e) (d) | Amortization Factor (e) | Pension Cost (a) + (c) - (d) (f) | Change in NPO (f) – (b) (g) | NPO Balance NPO + (g) (h) |
|-------------------------------|---|--|---------------------------|---------------------------------------|-------------------------------|---|--------------------------------------|---------------------------------|
| 2007 | - | _ | _ | _ | _ | _ | _ | \$0 |
| 2008 | \$8,937,748 | \$3,825,394 | \$0 | \$0 | 10.6328 | \$8,937,748 | \$5,112,354 | 5,112,354 |
| 2009 | 10,084,010 | 4,445,208 | 243,597 | 480,810 | 10.6328 | 9,846,797 | 5,401,589 | 10,513,943 |
| 2010 | 10,708,915 | 5,133,632 | 500,977 | 988,822 | 10.6328 | 10,221,070 | 5,087,438 | 15,601,381 |
| 2011 | 10,717,090 | 5,552,771 | 743,387 | 1,467,288 | 10.6328 | 9,993,189 | 4,440,418 | 20,041,799 |
| 2012 | 11,379,225 | 5,001,416 | 954,967 | 1,884,903 | 10.6328 | 10,449,289 | 5,447,873 | 25,489,672 |
| 2013 | 11,862,188 | 5,021,181 | 1,214,552 | 2,397,268 | 10.6328 | 10,679,472 | 5,658,291 | 31,147,963 |
| 2014 | 12,559,961 | 4,945,792 | 1,484,163 | 2,929,422 | 10.6328 | 11,114,702 | 6,168,910 | 37,316,873 |

^{*} The amount indicated for June 30, 2014 is assumed to be equal to an average rate of \$1.31 per \$100 of retirement plan benefit paid during July 1, 2013 through the end of the plan year. Will be updated to equal the actual employer contribution after June 30, 2014.



EXHIBIT VII

Actuarial Assumptions and Methods

Demographic Assumptions:

Mortality Rates:

After Service Retirement

and Pre-Retirement: RP-2000 Combined Healthy Mortality Table with ages set back two years for males

and one year for females.

After Disability Retirement: RP-2000 Combined Healthy Mortality Table with ages set back two years for males

and one year for females.

The tables shown above were determined to reasonably reflect mortality experience through the measurement date; however, they do not provide any margin for future mortality improvement.*

| rmination Rates before Retirement: | | | | | | |
|------------------------------------|-------------|--------|------------|--------|---------------------|--------|
| | Mortality** | | Disability | | Total Withdrawal*** | |
| Age | Male | Female | Male | Female | Male | Female |
| 25 | 0.037 | 0.020 | 0.006 | 0.000 | 6.550 | 9.200 |
| 30 | 0.039 | 0.025 | 0.012 | 0.006 | 4.350 | 7.250 |
| 35 | 0.063 | 0.044 | 0.012 | 0.036 | 3.060 | 5.550 |
| 40 | 0.096 | 0.065 | 0.018 | 0.072 | 2.180 | 4.150 |
| 45 | 0.130 | 0.103 | 0.030 | 0.102 | 1.660 | 3.150 |
| 50 | 0.186 | 0.155 | 0.054 | 0.138 | 1.260 | 2.450 |
| 55 | 0.292 | 0.242 | 0.126 | 0.168 | 0.980 | 2.100 |
| 60 | 0.527 | 0.444 | 0.240 | 0.000 | 0.720 | 1.100 |
| 65 | 1.001 | 0.862 | 0.000 | 0.000 | 0.420 | 0.350 |

^{*} The recommended mortality table from the 2012 Actuarial Experience Study is the RP-2000 Combined Healthy Mortality Table with ages set back one year, projected to 2030 with Scale AA. That table would include a margin for future mortality improvement.



^{** 5%} of pre-retirement deaths are assumed to be duty related, with the remaining being non-duty related.

^{***} No withdrawal is assumed after a member is first eligible to retire. Ordinary withdrawal members are assumed to receive their account balance at termination. Vested termination members are assumed to receive a deferred retirement benefit. 45% of terminations are assumed to be ordinary withdrawals, with the remaining being vested terminations.

Reporting Information for the Insured Lives Death Benefit Fund for Noncontributing Members of The Water and Power Employees' Retirement Plan of the City of Los Angeles **SECTION 3:**

| Retirement Rates: | Age | Under 30 Years of Service | Over 30 Years of Service |
|-------------------|-----|----------------------------------|--------------------------|
| | 50 | 0.00% | 0.00% |
| | 51 | 0.00 | 0.00 |
| | 52 | 0.00 | 0.00 |
| | 53 | 0.00 | 0.00 |
| | 54 | 0.00 | 0.00 |
| | 55 | 4.00 | 25.00 |
| | 56 | 3.00 | 15.00 |
| | 57 | 3.00 | 12.50 |
| | 58 | 3.00 | 12.50 |
| | 59 | 4.00 | 12.50 |
| | 60 | 5.00 | 20.00 |
| | 61 | 5.00 | 10.00 |
| | 62 | 5.00 | 10.00 |
| | 63 | 5.00 | 25.00 |
| | 64 | 5.00 | 20.00 |
| | 65 | 15.00 | 25.00 |
| | 66 | 15.00 | 25.00 |
| | 67 | 15.00 | 25.00 |
| | 68 | 15.00 | 25.00 |
| | 69 | 15.00 | 25.00 |
| | 70 | 100.00 | 100.00 |

| Vested Participants: | Inactive vested members are assumed to retire at age 60 with a Money Purchase Annuity. Members receiving Permanent Total Disability benefits are assumed to retire at the earlier of age 60 or age 55 with 30 years of service. |
|--------------------------------------|---|
| Definition of Active Members: | First day of biweekly payroll following employment for new Department employees or immediately following transfer from other city department. |
| Unknown Data for Members: | Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male. |



Data Adjustments: Data as of March 31 has been adjusted to June 30 by adding three months of age and

for active members three months of service. For members in pay status, we have

increased their Retirement Plan benefits by the assumed July 1 COLA.

Percent with Beneficiaries: All members are assumed to have a beneficiary at post-retirement death.

Future Benefit Accruals: 1.0 year of service per year.

Other Government Service: Members are assumed to purchase an additional 0.15 years of service per year.

Economic Assumptions:

Consumer Price Index: Increase of 3.50% per year; benefit increases due to CPI subject to 3.00% maximum.

Net Investment Return: 5.00%, net of administration and investment expenses.

Salary Increases:

Annual Rate of Compensation Increase

Inflation: 3.50% per year, plus "across the board" salary increases of 0.75% per year, plus the following merit and promotional increases.

| Years of Service | Increase |
|------------------|----------|
| 0 | 6.25% |
| 1 | 5.25% |
| 2 | 4.75% |
| 3 | 3.50% |
| 4 | 2.00% |
| 5 & Over | 1.10% |

The merit and promotional increases are added to the sum of the inflationary and "across the board" salary increases.



Actuarial Methods:

Actuarial Cost Method: Entry Age Actuarial Cost Method. Entry Age equals attained age less years

of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percent of salary, with Normal Cost determined as if the current benefit accrual rate had always been in

effect ("replacement life").

Actuarial Value of Assets: Total market value of the Death Benefit Fund at valuation date, less the Reserves for

Benefits Granted and Contribution Accounts for the Family Death Benefit and Supplemental Family Death Benefit, and the Insured Lives General Reserve for

Contributing Members (Mean Funds).

Funding Policy: The Department of Water and Power makes contributions based on a rate

recommended by the Board's Actuary designed to maintain the General Reserve at a

target level equal to the average of the benefits paid for the last five years.

Changes in Assumptions: There were no changes to the actuarial assumptions since the prior valuation.



EXHIBIT VIII

Summary of Plan Provisions

This exhibit summarizes the major provisions of the Insured Lives Death Benefit Fund for Noncontributing Members included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

| Plan Year: | July 1 through June 30 | | | | |
|--------------------------------------|--|--|--|--|--|
| Census Date: | March 31 | | | | |
| Death Benefit: | | | | | |
| Age & Service Requirement | Any age provided the member was employed by the Department for at least five years. | | | | |
| Amount | A single sum distribution equal to 14 times the member's Full Retirement Allowance (to a maximum of \$20,000). | | | | |
| Additional Requirement | Death must occur after retirement. | | | | |
| Member Contribution Rate: | None. | | | | |
| Department Contribution Rate: | Rate recommended by Board's Actuary as an amount per \$100 of retirement benefits paid during the year. | | | | |
| Changes in Plan Provisions: | There have been no changes in plan provisions since the last valuation. | | | | |

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