

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

DOCKET NO. R-2024-3045192

AND

DOCKET NO. R-2024-3045193

EXHIBITS TO ACCOMPANY DIRECT TESTIMONY

OF

HERBERT WALKER

GANNETT FLEMING
VALUATION AND RATE CONSULTANTS, LLC

VEOLIA WATER PENNSYLVANIA, INC.

February 2024

VEOLIA WATER PENNSYLVANIA, INC.
HARRISBURG, PENNSYLVANIA

RATE OF RETURN

EXHIBIT

TO ACCOMPANY THE
DIRECT TESTIMONY

JANUARY 2024

Prepared by:



Veolia Pennsylvania, Inc.
 Cost of Capital and Fair Rate of Return
Projected at October 31, 2025

| <u>Type of Capital</u> | <u>Ratios*</u> | <u>Cost Rate*</u> (%) | <u>Weighted Cost Rate</u> (%) |
|--|----------------|------------------------------|--------------------------------------|
| Debt | 46.00% | 4.60 | 2.12% |
| Preferred Stock | 0.00 | 0.00 | 0.00 |
| Common Equity | <u>54.00</u> | 10.80 | <u>5.83</u> |
| Overall Cost of Capital | <u>100.00%</u> | | <u>7.95%</u> |
| Before Income Tax Interest Coverage (x) (Based on effective income tax rate of 21.00%.) | | 4.5x | |

* Ratios and embedded cost rates are from Exhibit GRH-2, Sch 1.2 The capital structure ratios are those of Veolia Water Resources, Inc.

Capital Structure Ratios for
The Water Group Followed by Analysts
At 6/30/2023 and Estimated for 2027

| | <u>6/30/2023</u> | Est.(1) <u>2027</u> |
|---|------------------|------------------------|
| <u>Water Group Followed by Analysts</u> | | |
| Long-term Debt | 50.4 % | 47.7 % |
| Preferred Stock | 0.1 | 0.0 |
| Common Equity | <u>49.5</u> | <u>52.3</u> |
| Total | <u>100.0</u> % | <u>100.0</u> % |

Notes: (1) Project by Value Line for the period 2026 to 2028.

Source of Information: Value Line Investment Survey, 10/6/23, and S&P Capital IQ

Capital Structure Ratios for
The Water Group Followed by Analysts
At 6/30/2023 and Estimated for 2027

| | Actual at 6/30/23 | | |
|---|-------------------|--------------------|------------------|
| | Long-term Debt | Preferred Stock | Common Equity |
| <u>Water Group Followed by Analysts</u> | | | |
| American States Water Co | 52.3 | 0.0 | 47.7 |
| American Water Works Co Inc | 55.8 | 0.0 | 44.2 |
| California Water Service Gp | 43.1 | 0.0 | 56.9 |
| Essential Utilities, Inc. | 55.0 | 0.0 | 45.0 |
| Middlesex Water Co | 47.3 | 0.3 | 52.4 |
| SJW Corp | 56.9 | 0.0 | 43.1 |
| York Water Co | <u>42.7</u> | <u>0.0</u> | <u>57.3</u> |
| Average | <u>50.4</u> | <u>0.1</u> | <u>49.5</u> |

| | Estimated at 2027 | | |
|---|-------------------|--------------------|------------------|
| | Long-term Debt | Preferred Stock | Common Equity |
| <u>Water Group Followed by Analysts</u> | | | |
| American States Water Co | 50.0 | 0.0 | 50.0 |
| American Water Works Co Inc | 57.5 | 0.0 | 42.5 |
| California Water Service Gp | 38.0 | 0.0 | 62.0 |
| Essential Utilities, Inc. | 56.0 | 0.0 | 44.0 |
| Middlesex Water Co | 40.5 | 0.0 | 59.5 |
| SJW Corp | 44.0 | 0.0 | 56.0 |
| York Water Co | <u>NA</u> | <u>NA</u> | <u>NA</u> |
| Average | <u>47.7</u> | <u>0.0</u> | <u>52.3</u> |

Source of Information: Value Line Investment Survey, 10/6/23, and S&P Capital IQ

Veolia Water Pennsylvania, Inc
Five Year Analysis
2018 - 2022 (1)

| <u>Ln #</u> | <u>2022</u> | <u>2021</u> | <u>2020</u> | <u>2019</u> | <u>2018</u> | <u>Average Ann. Chg(%)</u> | <u>Average Central Values(9)</u> | |
|-------------|-------------------------------------|----------------|----------------|----------------|----------------|--------------------------------|--|--|
| | (Millions of \$) | | | | | | | |
| | Investor Provided Capital(\$) | | | | | | | |
| 1 | Permanent Capital | 295.336 | 279.576 | 265.000 | 236.158 | 206.255 | 9.5 | |
| 2 | Short-Term Debt | <u>0.000</u> | <u>0.000</u> | <u>0.000</u> | <u>0.000</u> | <u>0.000</u> | | |
| 3 | Total Capital | <u>295.336</u> | <u>279.576</u> | <u>265.000</u> | <u>236.158</u> | <u>206.255</u> | 9.5 | |
| 4 | Total Revenue(\$) | 58.218 | 55.772 | 54.086 | 52.698 | 45.804 | 6.3 | |
| 5 | Construction(\$) | 27.189 | 20.260 | 33.513 | 44.958 | 25.611 | 11.2 | |
| 6 | Effective Income Tax Rate(%) | 19.5 | 22.5 | 6.5 | 30.5 | 29.2 | 21.6 | |
| | Capitalization Ratios(%) | | | | | | | |
| 7 | Long-Term Debt | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 8 | Preferred Stock | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 9 | Common Equity | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | 100.0 | |
| | Total | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | | |
| 10 | Total Debt | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 11 | Preferred Stock | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 12 | Common Equity | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | 100.0 | |
| | Total | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | | |
| | Rates on Average Capital(2)(%) | | | | | | | |
| 13 | Total Debt | NA | NA | NA | NA | NA | NA | |
| 14 | Long-Term Debt | NA | NA | NA | NA | NA | NA | |
| 15 | Preferred Stock | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| | Coverage - Including AFC(3)(x) | | | | | | | |
| 16 | PreTax Interest | 5.5 | 5.6 | 5.2 | 5.7 | 4.2 | 5.2 | |
| 17 | PreTax Interest + Pref. Div | 5.5 | 5.6 | 5.2 | 5.7 | 4.2 | 5.2 | |
| 18 | PostTax Interest + Pref. Div | 4.6 | 4.5 | 5.0 | 4.3 | 3.3 | 4.3 | |
| | Coverage - Excluding AFC(3)(x) | | | | | | | |
| 19 | PreTax Interest | 5.5 | 5.6 | 5.2 | 5.7 | 4.2 | 5.2 | |
| 20 | PreTax Interest + Pref. Div | 5.5 | 5.6 | 5.2 | 5.7 | 4.2 | 5.2 | |
| 21 | PostTax Interest + Pref. Div | 4.6 | 4.5 | 5.0 | 4.3 | 3.3 | 4.3 | |
| 22 | GCF / Interest Coverage(4)(x) | 6.9 | 6.4 | 6.1 | 5.9 | 5.5 | 6.2 | |
| 23 | Coverage of Common Dividends(5)(x) | 7.4 | 6.5 | 0.0 | 566.2 | 193.2 | 154.7 | |
| 24 | Construction / Avg. Tot. Capital(%) | 9.5 | 7.4 | 13.4 | 20.3 | 13.0 | 12.7 | |
| 25 | NCF / Construction(6)(%) | 100.6 | 108.9 | 77.1 | 49.2 | 76.8 | 82.5 | |
| 26 | AFC / Income for Common Stock | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 27 | GCF / Avg. Tot. Debt(7)(%) | NA | NA | NA | NA | NA | NA | |
| 28 | GCF / Permanent Capital(8)(%) | 10.7 | 9.3 | 9.7 | 9.4 | 9.6 | 9.7 | |

See page 2 of this Schedule for notes.

Veolia Water Pennsylvania, Inc.
Five Year Analysis
2018-2022

Notes:

- (1) Based upon the achieved results as originally reported.
- (2) Computed by relating total debt interest, long-term debt interest and preferred dividend expense to average of beginning and ending balance of the respective capital outstanding.
- (3) The coverage calculations, both including and excluding AFC, represent the number of times available earnings cover the various fixed charges.
- (4) GCF or gross cash flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less AFC), plus interest charges, divided by interest charges.
- (5) GCF (see note 4) less all preferred dividends which cover common dividends.
- (6) The percent of GCF (see note 4) less all cash dividends which cover gross construction expenditures.
- (7) GCF (see note 4) as a percentage of Permanent Capital (long-term debt, current maturities and preferred, preference and common equity).
- (8) GCF (see note 4) as a percentage of average total debt.
- (9) Average of the second, third and fourth quintile values.

Source of Information: Annual Reports filed with the PUC

Water Group Followed by Analysts
Five Year Analysis
2018 - 2022 (1)

| <u>Ln #</u> | <u>2022</u> | <u>2021</u> | <u>2020</u> | <u>2019</u> | <u>2018</u> | Average <u>Ann. Chg(%)</u> | Average <u>Central Values(9)</u> | |
|-------------|-------------------------------------|----------------|----------------|----------------|----------------|-------------------------------|---|--|
| | (Millions of \$) | | | | | | | |
| | Investor Provided Capital(\$) | | | | | | | |
| 1 | Permanent Capital | 5,153.338 | 4,667.439 | 3,933.051 | 3,230.128 | 2,836.135 | 16.2 | |
| 2 | Short-Term Debt | <u>120.245</u> | <u>278.756</u> | <u>162.140</u> | <u>171.857</u> | <u>188.340</u> | | |
| 3 | Total Capital | 5,273.584 | 4,946.196 | 4,095.190 | 3,401.985 | 3,024.475 | 15.1 | |
| 4 | Total Revenue(\$) | 1,124.265 | 1,040.317 | 899.254 | 856.759 | 835.976 | 7.8 | |
| 5 | Construction(\$) | 511.706 | 488.708 | 414.853 | 386.422 | 357.285 | 9.5 | |
| 6 | Effective Income Tax Rate(%) | 7.1 | 8.9 | 13.4 | 14.4 | 32.2 | 15.2 | |
| | Book Capitalization Ratios(%) | | | | | | | |
| 7 | Long-Term Debt | 51.9 | 51.5 | 49.3 | 46.2 | 45.6 | 48.9 | |
| 8 | Preferred Stock | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | |
| 9 | Common Equity | <u>48.1</u> | <u>48.4</u> | <u>50.6</u> | <u>53.7</u> | <u>54.3</u> | 51.0 | |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | |
| 10 | Total Debt | 52.6 | 53.8 | 50.9 | 48.5 | 49.0 | 51.0 | |
| 11 | Preferred Stock | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | |
| 12 | Common Equity | <u>47.4</u> | <u>46.1</u> | <u>49.0</u> | <u>51.4</u> | <u>50.9</u> | 49.0 | |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | |
| | Rates on Average Capital(2)(%) | | | | | | | |
| 13 | Total Debt | 3.5 | 3.8 | 4.4 | 5.1 | 4.9 | 4.4 | |
| 14 | Long-Term Debt | 3.5 | 3.6 | 4.2 | 5.1 | 5.1 | 4.3 | |
| 15 | Preferred Stock | 5.8 | 5.8 | 5.8 | 5.9 | 5.9 | 5.8 | |
| | Coverage - Including AFC(3)(x) | | | | | | | |
| 16 | PreTax Interest | 4.2 | 4.0 | 3.6 | 3.7 | 4.8 | 4.1 | |
| 17 | PreTax Interest + Pref. Div | 4.2 | 4.0 | 3.6 | 3.7 | 4.8 | 4.1 | |
| 18 | PostTax Interest + Pref. Div | 3.9 | 3.7 | 3.3 | 3.3 | 3.6 | 3.6 | |
| | Coverage - Excluding AFC(3)(x) | | | | | | | |
| 19 | PreTax Interest | 4.1 | 3.9 | 3.5 | 3.6 | 4.7 | 4.0 | |
| 20 | PreTax Interest + Pref. Div | 4.1 | 3.9 | 3.5 | 3.6 | 4.7 | 4.0 | |
| 21 | PostTax Interest + Pref. Div | 3.8 | 3.6 | 3.2 | 3.2 | 3.5 | 3.5 | |
| 22 | GCF / Interest Coverage(4)(x) | 6.0 | 5.5 | 5.1 | 5.0 | 6.1 | 5.5 | |
| 23 | Coverage of Common Dividends(5)(x) | 3.5 | 3.3 | 3.0 | 3.2 | 4.0 | 3.4 | |
| 24 | Construction / Avg. Tot. Capital(%) | 12.0 | 12.9 | 12.8 | 13.6 | 14.4 | 13.1 | |
| 25 | NCF / Construction(6)(%) | 55.5 | 48.9 | 46.7 | 49.2 | 62.0 | 52.5 | |
| 26 | AFC / Income for Common Stock | 3.7 | 4.3 | 6.5 | 3.6 | 3.7 | 4.4 | |
| 27 | GCF / Avg. Tot. Debt(7)(%) | 17.2 | 16.9 | 17.7 | 19.3 | 23.9 | 19.0 | |
| 28 | GCF / Permanent Capital(8)(%) | 8.8 | 8.6 | 8.3 | 9.1 | 11.9 | 9.3 | |

See page 2 of this Schedule for notes.

Water Group Followed by Analysts
Five Year Analysis
2018-2022

Notes:

- (1) Average of the achieved results for each individual company based upon the financials as originally reported.
- (2) Computed by relating total debt interest, long-term debt interest and preferred dividend expense to average of beginning and ending balance of the respective capital outstanding.
- (3) The coverage calculations, both including and excluding AFC, represent the number of times available earnings cover the various fixed charges.
- (4) GCF or gross cash flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less AFC), plus interest charges, divided by interest charges.
- (5) GCF (see note 4) less all preferred dividends which cover common dividends.
- (6) The percent of GCF (see note 4) less all cash dividends which cover gross construction expenditures.
- (7) GCF (see note 4) as a percentage of Permanent Capital (long-term debt, current maturities and preferred, preference and common equity).
- (8) GCF (see note 4) as a percentage of average total debt.
- (9) Average of the second, third and fourth quintile values.

Source of Information: Standard & Poor's and Annual Reports

S&P Utilities
Five Year Analysis
2018 - 2022 (1)

| <u>Ln #</u> | <u>2022</u> | <u>2021</u> | <u>2020</u> | <u>2019</u> | <u>2018</u> | Average <u>Ann. Chg(%)</u> | | |
|-------------|-------------------------------------|------------------|------------------|------------------|------------------|-------------------------------|-------------------------------------|---|
| | (Millions of \$) | | | | | | | |
| | Investor Provided Capital(\$) | | | | | | | |
| 1 | Permanent Capital | 62,000.528 | 58,853.544 | 54,469.994 | 50,527.640 | 44,720.496 | 8.5 | |
| 2 | Short-Term Debt | <u>2,255.578</u> | <u>1,719.597</u> | <u>1,471.710</u> | <u>1,620.368</u> | <u>2,253.561</u> | | |
| 3 | Total Capital | 64,256.107 | 60,573.140 | 55,941.704 | 52,148.008 | 46,974.058 | 8.2 | |
| 4 | Total Revenue(\$) | 17,246.567 | 14,450.899 | 13,253.661 | 14,495.267 | 14,333.991 | 5.2 | |
| 5 | Construction(\$) | 7,597.502 | 6,837.594 | 6,376.706 | 6,234.422 | 5,492.199 | 8.5 | |
| 6 | Effective Income Tax Rate(%) | 3.5 | 10.3 | 1.4 | 9.0 | 29.8 | Five Year <u>Average</u> 10.8 | |
| | Book Capitalization Ratios(%) | | | | | | | Average Central <u>Values(9)</u> 9.0 |
| 7 | Long-Term Debt | 58.2 | 57.3 | 57.1 | 55.9 | 55.9 | 56.9 | |
| 8 | Preferred Stock | 0.7 | 0.7 | 0.9 | 0.9 | 0.5 | 0.7 | |
| 9 | Common Equity | <u>41.1</u> | <u>41.9</u> | <u>42.0</u> | <u>43.2</u> | <u>43.6</u> | 42.4 | |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 42.0 | |
| 10 | Total Debt | 59.9 | 58.7 | 58.3 | 57.4 | 58.1 | 58.5 | |
| 11 | Preferred Stock | 0.6 | 0.7 | 0.9 | 0.8 | 0.5 | 0.7 | |
| 12 | Common Equity | <u>39.5</u> | <u>40.6</u> | <u>40.8</u> | <u>41.8</u> | <u>41.4</u> | 40.8 | |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 40.8 | |
| | Rates on Average Capital(2)(%) | | | | | | | |
| 13 | Total Debt | 3.1 | 3.4 | 3.8 | 4.3 | 4.2 | 3.8 | |
| 14 | Long-Term Debt | 4.3 | NA | NA | NA | NA | 4.3 | |
| 15 | Preferred Stock | 3.4 | 3.5 | 1.9 | 3.7 | 46.9 | 11.9 | |
| | Coverage - Including AFC(3)(x) | | | | | | | |
| 16 | PreTax Interest | 3.8 | 3.1 | 2.7 | 3.0 | 2.9 | 3.1 | |
| 17 | PreTax Interest + Pref. Div | 3.8 | 3.1 | 2.7 | 3.0 | 2.9 | 3.1 | |
| 18 | PostTax Interest + Pref. Div | 3.4 | 2.8 | 2.5 | 2.8 | 2.7 | 2.9 | |
| | Coverage - Excluding AFC(3)(x) | | | | | | | |
| 19 | PreTax Interest | 3.7 | 3.0 | 2.6 | 2.9 | 2.9 | 3.0 | |
| 20 | PreTax Interest + Pref. Div | 3.7 | 3.0 | 2.6 | 2.9 | 2.9 | 3.0 | |
| 21 | PostTax Interest + Pref. Div | 3.3 | 2.8 | 2.4 | 2.8 | 2.6 | 2.8 | |
| 22 | GCF / Interest Coverage(4)(x) | 6.9 | 5.5 | 4.9 | 5.0 | 5.0 | 5.5 | |
| 23 | Coverage of Common Dividends(5)(x) | 3.2 | 3.2 | 3.1 | 4.1 | 3.9 | 3.5 | |
| 24 | Construction / Avg. Tot. Capital(%) | 12.1 | 11.5 | 12.1 | 12.6 | 12.7 | 12.2 | |
| 25 | NCF / Construction(6)(%) | 54.2 | 62.4 | 52.9 | 65.8 | 56.0 | 58.3 | |
| 26 | AFC / Income for Common Stock | 2.6 | 0.5 | 12.7 | 5.3 | 3.4 | 4.9 | |
| 27 | GCF / Avg. Tot. Debt(7)(%) | 13.9 | 14.5 | 14.3 | 16.5 | 16.1 | 15.1 | |
| 28 | GCF / Permanent Capital(8)(%) | 8.1 | 8.4 | 8.1 | 9.1 | 9.2 | 8.6 | |

See page 2 of this Schedule for notes.

S&P Public Utilities
Five Year Analysis
2018-2022

Notes:

- (1) Market value weighted achieved results for each individual company based upon the financials as originally reported.
- (2) Computed by relating total debt interest, long-term debt interest and preferred dividend expense to average of beginning and ending balance of the respective capital outstanding.
- (3) The coverage calculations, both including and excluding AFC, represent the number of times available earnings cover the various fixed charges.
- (4) GCF or gross cash flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less AFC), plus interest charges, divided by interest charges.
- (5) GCF (see note 4) less all preferred dividends which cover common dividends.
- (6) The percent of GCF (see note 4) less all cash dividends which cover gross construction expenditures.
- (7) GCF (see note 4) as a percentage of Permanent Capital (long-term debt, current maturities and preferred, preference and common equity).
- (8) GCF (see note 4) as a percentage of average total debt.
- (9) Average of the second, third and fourth quintile values.

Source of Information: Standard & Poor's, Moody's and Annual Reports

Risk Measures for the Common Stock of
The Water Group Followed by Analysts and the S&P Utilities

| | Recent S&P Issuer Credit Rating | Stock Exchange | Recent S&P Quality Ranking | Value Line Beta | Recent Market Value 11/30/23 (Mill \$) | Market Quartile | Market Quartile Name |
|---|--|-------------------|-------------------------------------|-----------------------|--|--------------------|----------------------------|
| <u>Water Group Followed by Analysts</u> | | | | | | | |
| American States Water Co | A | NYSE | High (A) | 0.70 | 2,954.749 | 2 | Mid-Cap |
| American Water Works Co Inc | A | NYSE | High (A) | 0.95 | 25,669.907 | 1 | Large-Cap |
| California Water Service Gp | A+ | NYSE | Above Average (A-) | 0.70 | 2,918.445 | 2 | Mid-Cap |
| Essential Utilities, Inc. | A | NYSE | High (A) | 1.00 | 9,727.435 | 2 | Mid-Cap |
| Middlesex Water Co | A | NasdaqGS | High (A) | 0.75 | 1,137.848 | 3 | Low-Cap |
| SJW Corp | A- | NYSE | Average (B+) | 0.85 | 2,096.082 | 3 | Low-Cap |
| York Water Co | <u>A-</u> | NasdaqGS | <u>High (A)</u> | <u>0.80</u> | <u>545.373</u> | <u>3</u> | <u>Low-Cap</u> |
| Average | <u>A</u> | | <u>High (A)</u> | <u>0.82</u> | <u>2,918.445</u> | <u>2</u> | <u>Mid-Cap</u> |
| <u>S&P Public Utilities</u> | | | | | | | |
| AES Corporation (The) | BBB- | NYSE | Lower (B-) | 1.15 | 11,524.316 | 2 | Mid-Cap |
| Alliant Energy Corporation | A- | NasdaqGS | High (A) | 0.85 | 12,904.406 | 2 | Mid-Cap |
| Ameren Corporation | BBB+ | NYSE | High (A) | 0.85 | 20,401.906 | 1 | Large-Cap |
| American Electric Power Company, Inc | A- | NasdaqGS | Above Average (A-) | 0.75 | 41,833.407 | 1 | Large-Cap |
| American Water Works Company, Inc. | A | NYSE | High (A) | 0.80 | 25,669.907 | 1 | Large-Cap |
| Atmos Energy Corporation | A- | NYSE | High (A) | 0.85 | 16,900.342 | 1 | Large-Cap |
| CenterPoint Energy, Inc. | BBB+ | NYSE | Average (B+) | 1.10 | 17,844.690 | 1 | Large-Cap |
| CMS Energy Corporation | BBB+ | NYSE | High (A) | 0.80 | 16,560.500 | 1 | Large-Cap |
| Consolidated Edison, Inc. | A- | NYSE | Average (B+) | 0.80 | 31,107.754 | 1 | Large-Cap |
| Constellation Energy Corporation | - | NasdaqGS | NA | NMF | 38,657.959 | 1 | Large-Cap |
| Dominion Energy, Inc. | BBB+ | NYSE | Below Average (B) | 0.85 | 37,940.366 | 1 | Large-Cap |
| DTE Energy Company | BBB+ | NYSE | Above Average (A-) | 0.95 | 21,473.596 | 1 | Large-Cap |
| Duke Energy Corporation | BBB+ | NYSE | Average (B+) | 0.85 | 71,121.278 | 1 | Large-Cap |
| Edison International | BBB | NYSE | Below Average (B) | 1.00 | 25,695.268 | 1 | Large-Cap |
| Entergy Corporation | BBB+ | NYSE | Below Average (B) | 0.95 | 21,445.484 | 1 | Large-Cap |
| Eversource Energy | BBB+ | NasdaqGS | Above Average (A-) | 0.90 | 11,724.947 | 2 | Mid-Cap |
| Exelon Corporation | A- | NYSE | High (A) | 0.90 | 20,753.470 | 1 | Large-Cap |
| Exelon Corporation | BBB+ | NasdaqGS | Below Average (B) | NMF | 38,334.295 | 1 | Large-Cap |
| FirstEnergy Corp. | BBB- | NYSE | Below Average (B) | 0.85 | 21,196.720 | 1 | Large-Cap |
| NextEra Energy, Inc. | A- | NYSE | Above Average (A-) | 0.95 | 120,045.420 | 1 | Large-Cap |
| NiSource Inc. | BBB+ | NYSE | Below Average (B) | 0.90 | 10,599.972 | 2 | Mid-Cap |
| NRG Energy, Inc. | BB | NYSE | Below Average (B) | 1.10 | 10,800.571 | 2 | Mid-Cap |
| PG&E Corporation | BB- | NYSE | In Reorganization (D) | 1.10 | 36,632.335 | 1 | Large-Cap |
| Pinnacle West Capital Corporation | BBB+ | NYSE | Above Average (A-) | 0.90 | 8,498.072 | 2 | Mid-Cap |
| PPL Corporation | A- | NYSE | Below Average (B) | 1.10 | 19,253.689 | 1 | Large-Cap |
| Public Service Enterprise Group Incorp | BBB+ | NYSE | Average (B+) | 0.95 | 31,109.762 | 1 | Large-Cap |
| Sempra Energy | BBB+ | NYSE | Average (B+) | 1.00 | 45,859.136 | 1 | Large-Cap |
| Southern Co (The) | BBB+ | NYSE | Average (B+) | 0.90 | 77,412.161 | 1 | Large-Cap |
| WEC Energy Group, Inc. | A- | NYSE | High (A) | 0.80 | 26,376.635 | 1 | Large-Cap |
| Xcel Energy Inc. | <u>A-</u> | NasdaqGS | <u>High (A)</u> | <u>0.85</u> | <u>33,572.505</u> | <u>1</u> | <u>Large-Cap</u> |
| Average | <u>BBB+</u> | | <u>Average (B+)</u> | <u>0.92</u> | <u>23,571.752</u> | <u>1</u> | <u>Large-Cap</u> |

Comparative Ratios
For Veolia Water Pennsylvania, Inc,
For the Water Group Followed by Analysts,
S&P Utilities, and S&P 500
For the Years 2018-2022(1)

| | <u>2022</u> | <u>2021</u> | <u>2020</u> | <u>2019</u> | <u>2018</u> | <u>Five Year Average</u> |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|----------------------------------|
| <u>Return on Common Equity(2)</u> | | | | | | |
| Veolia Water Pennsylvania, Inc | 6.8 | 6.3 | 8.0 | 6.7 | 5.1 | 6.6 |
| Water Group Followed by Analysts | 9.6 | 11.3 | 10.5 | 9.5 | 10.1 | 10.2 |
| S&P Utilities | 8.2 | 8.5 | 7.5 | 29.0 | 10.1 | 12.7 |
| S&P 500 | 17.1 | 20.5 | 10.3 | 15.8 | 15.9 | 15.9 |
| <u>Market/Book Multiple(3)</u> | | | | | | |
| Water Group Followed by Analysts | 3.3 | 3.6 | 3.3 | 3.4 | 3.1 | 3.3 |
| S&P Utilities | 2.6 | 2.6 | 2.2 | 2.6 | 1.8 | 2.4 |
| S&P 500 | 4.1 | 4.4 | 3.3 | 3.2 | 3.2 | 3.2 |
| <u>Earnings/Price Ratio(4)</u> | | | | | | |
| Water Group Followed by Analysts | 3.0 | 3.1 | 3.2 | 2.7 | 3.3 | 3.1 |
| S&P Utilities | 3.9 | 3.8 | 3.5 | 4.0 | 4.0 | 3.8 |
| S&P 500 | 4.1 | 4.7 | 3.2 | 4.9 | 5.1 | 4.4 |
| <u>Dividend Payout Ratio(5)</u> | | | | | | |
| Veolia Water Pennsylvania, Inc | 21.8 | 23.6 | 0.0 | 0.3 | 1.0 | 9.3 |
| Water Group Followed by Analysts | 58.9 | 53.7 | 57.4 | 73.2 | 60.5 | 60.7 |
| S&P Utilities | 80.2 | 221.2 | 104.4 | 100.4 | 58.4 | 112.9 |
| S&P 500 | 38.2 | 30.2 | 60.4 | 42.0 | 40.4 | 42.2 |
| <u>Dividend Yield(6)</u> | | | | | | |
| Water Group Followed by Analysts | 1.8 | 1.7 | 1.8 | 1.8 | 2.0 | 1.8 |
| S&P Utilities | 3.0 | 3.1 | 3.4 | 3.3 | 3.6 | 3.3 |
| S&P 500 | 1.6 | 1.4 | 1.9 | 2.1 | 2.0 | 1.8 |

See next page for Notes.

Comparative Ratios For
Veolia Water Pennsylvania, Inc.,
The Water Group Followed by Analysts,
The S&P Utilities, and the S&P 500
For the Years 2018-2022 (1)

Notes:

- (1) The average of achieved results for the companies in each group. The information for the S&P Public Utilities is market weighted. The information for the S&P 500 is based upon per share information adjusted to price index level.
- (2) Rate of Return on Average Book Common Equity - income available for common equity divided by average beginning and ending year's balance of book common equity.
- (3) Market/Book Ratio - average of yearly high-low market price divided by the average of beginning and ending year's book value per share.
- (4) Earnings/Price Ratio - reported earnings per share yearly divided by the average of yearly high-low market price.
- (5) Dividend Payout Ratio is computed by dividing the yearly reported dividends paid by the yearly income available for common equity.
- (6) Dividend Yield - yearly dividend per share divided by the average yearly high-low market price.

Source of Information: Standard & Poor's and Annual Reports

Capital Intensity and Capital Recovery
 Veolia Water Pennsylvania, Inc
 The Water Group Followed by Analysts, and S&P Utilities
For the Year 2022

| | <u>Capital Intensity</u> | <u>Rate of Capital Recovery</u> | <u>Capital Recovery Years</u> |
|----------------------------------|------------------------------|---|---------------------------------------|
| Veolia Water Pennsylvania, Inc | <u>\$8.16</u> | <u>1.86%</u> | <u>53.8</u> |
| Water Group Followed by Analysts | <u>\$6.63</u> | <u>2.19%</u> | <u>46.7</u> |
| S&P Utilities | <u>\$4.45</u> | <u>3.61%</u> | <u>32.1</u> |

Relative Size of
Veolia Water Pennsylvania, Inc
Versus the Water Group Followed by Analysts
For the Year 2022

| | <u>Veolia Water Pennsylvania, Inc</u> | <u>Water Group Followed by Analysts</u> | Water Group Followed by Analysts Vs. <u>Veolia Water Pennsylvania, Inc</u> |
|----------------------------------|---|---|--|
| Total Capitalization (000's) | \$295,336 | \$5,498,000 | 18.6 x |
| Total Operating Revenues (000's) | \$58,218 | \$1,180,000 | 20.3 x |
| Number of Customers | 66,016 | 963,355 | 14.6 x |

Institutional Holdings, Insider Holdings and Percentage of Shares Traded Annually for
The Water Group Followed by Analysts, and the S&P Utilities

| | Water Group Followed by <u>Analysts</u> | S&P <u>Public Utilities</u> |
|--|---|--------------------------------|
| Percentage of common shares held by insiders (1) | 2.1% | 0.2% |
| Percentage of common shares held by institutions (2) | 77% | 84% |
| Percentage of Common Shares Traded in 2021 | 112% | 156% |
| Percentage of Common Shares Traded in 2022 | 123% | 169% |
| Average Number of Months For All Common Shares to Turnover (3) | 10.6 | 7.2 |

Notes: (1) An insider is a director or an officer who has a policy-making role or a person who is directly or indirectly the beneficial owner of more than 10% of a certain company's stock. An insider may be either an individual or a corporation. Insiders are required to disclose their purchase/sale transactions to the SEC in which a change in beneficial ownership has occurred. The filings must be submitted before the end of the second business day following the day on which the transaction had been executed.

(2) Institutional holders are those investment managers having a fair market value of equity assets under management of \$100 million or more. Certain banks, insurance companies, investment advisers, investment companies, foundations and pension funds are included in this category.

(3) Based on average turnover (shares traded) over the past five years.

Bond and Credit Ratings for
Veolia Water Pennsylvania, Inc., Veolia Utility Resources LLC and
The Water Group Followed by Analysts

| | S&P Credit Rating |
|---|-------------------------|
| Veolia Water Pennsylvania, Inc | <u>NA</u> |
| Veolia Utility Resources LLC | <u>A</u> |
| <u>Water Group Followed by Analysts</u> | |
| American States Water Co | A+ |
| American Water Works Co Inc | A |
| California Water Service Gp * | A+ |
| Essential Utilities, Inc. | A |
| Middlesex Water Co | A |
| SJW Corp | A- |
| York Water Co | A- |
| Average | <u>A</u> |

* - The A+ bond rating is that for California Water Service, Inc.

Comparison of Credit Measures of Financial Risk
Veolia Water Pennsylvania, Inc and
For the Water Group Followed by Analysts(1)

| | Spot in Credit Measures of Financial Risk (For the Year 2022) | | | Trend in Credit Measures of Financial Risk (Five-Year Average 2018-22) | | |
|---|--|--------------------|--|---|--------------------|--|
| | Credit Implication | Subject Company | Water Group Followed by Analysts | Credit Implication | Subject Company | Water Group Followed by Analysts |
| 1. Base Credit Metrics | | | | | | |
| 2. PreTax Interest Coverage(2)(x) | Higher | 5.5x | 3.8x | Higher | 5.2x | 3.8x |
| 3. Total Debt/Total Capital(%) | NA | NA | 51.9% | NA | NA | 51.5% |
| 4. GCF / Interest Coverage(3)(x) | Higher | 6.9x | 5.5x | Higher | 6.2x | 5.4x |
| 5. GCF / Average Total Debt(4)(%) | NA | NA | 15.9% | NA | NA | 17.4% |
| 6. NCF / Construction(5)(%) | Higher | 100.6% | 45.9% | Higher | 82.5% | 49.2% |
| 7. Construction / Average Total Capital(6)(%) | Higher | 9.5% | 12.0% | Lower | 12.7% | 12.2% |
| 8. Standard & Poor's Credit Metrics | | | | | | |
| 9. Funds from Operation / Average Total Debt(7)(%) | NA | NA | 15.5% | NA | NA | 17.1% |
| 10. Average Total Debt / EBITDA(8)(x) | NA | NA | 5.3x | NA | NA | 4.9x |
| 11. FFO / Interest Coverage(9)(x) | Higher | 6.9x | 5.4x | Higher | 6.2x | 5.3x |
| 12. EBITDA / Interest(10)(x) | Higher | 7.1x | 5.5x | Higher | 7.0x | 5.5x |
| 13. CFO / Average Total Debt(11)(%) | NA | NA | 15.9% | NA | NA | 17.4% |
| 14. FOCF / Average Total Debt(12)(%) | NA | NA | -7.9% | NA | NA | -7.0% |
| 15. DCF / Average Total Debt(13)(%) | NA | NA | -13.3% | NA | NA | -12.8% |
| 16. Moody's Credit Metrics | | | | | | |
| 17. Cash Flow Interest Coverage(3) (x) | Higher | 6.9x | 5.5x | Higher | 6.2x | 5.4x |
| 18. Cash Flow / Average Total Debt(4)(%) | NA | NA | 15.9% | NA | NA | 17.4% |
| 19. Retained Cash Flow / Average Total Debt(14)(%) | NA | NA | 10.6% | NA | NA | 11.6% |
| 20. Average Total Debt / Average Adjusted Total Capital(15)(%) | NA | NA | 46.9% | NA | NA | 45.8% |
| 21. Capital Credit Metrics | | | | | | |
| 22. Standard & Poor's Credit Metrics - Adjusted to Total Capital | | | | | | |
| 23. Funds from Operation / Average Total Capital(16)(%) | Higher | 11.0% | 7.9% | Higher | 10.2% | 8.5% |
| 24. Average Total Capital / EBITDA(17)(x) | Higher | 7.5x | 10.0x | Higher | 7.3x | 9.4x |
| 25. CFO / Average Total Capital(18)(%) | Higher | 13.4% | 8.1% | Higher | 13.9% | 8.7% |
| 26. FOCF / Average Total Capital(19)(%) | Higher | 3.9% | -3.9% | Higher | 1.2% | -3.5% |
| 27. DCF / Average Total Capital(20)(%) | Higher | 2.5% | -6.7% | Higher | 0.5% | -6.3% |
| 28. Moody's Credit Metrics - Adjusted to Total Capital | | | | | | |
| 29. Cash Flow / Average Total Capital(21)(%) | Higher | 11.0% | 8.1% | Higher | 10.2% | 8.7% |
| 30. Retained Cash Flow / Average Total Capital(22)(%) | Higher | 9.5% | 5.4% | Higher | 9.6% | 5.9% |

See the next page for notes.

Comparison of Credit Market Financial Risk Metrics
For Veolia Water Pennsylvania, Inc. and
The Water Group Followed by Analysts
2018 - 2022

Notes:

- (1) Average of the achieved results for each individual company based upon the financials as originally reported.
- (2) Represents the number of times available pretax earnings (“EBIT”), excluding AFC, cover all interest charges.
- (3) GCF or gross cash flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less AFC), plus interest charges, divided by interest charges.
- (4) GCF (see note 3) as a percentage of average total debt.
- (5) The percent of GCF (see note 3) less all cash dividends which cover gross construction expenditures.
- (6) Construction expenditures as a percentage of average total capital.
- (7) Funds from operations (“FFO”), revenue minus operating expenses, plus depreciation and amortization expenses (“EBITDA”) less net interest expense less current tax expense, as a percentage of average total debt.
- (8) Average total debt divided by EBITDA (see note 7).
- (9) FFO (see note 7) plus interest charges, divided by interest charges.
- (10) EBITDA (see note 7) divided by interest charges.
- (11) Cash flow from operations (“CFO”), GCF (see note 3) plus changes in operating assets and liabilities (working capital), as a percentage of average total debt.
- (12) Free operating cash flow (“FOCF”), CFO (see note 11) minus capital expenditures, as a percentage of average total debt.
- (13) Discretionary cash flow (“DCF”), FOCF (see note 12) minus cash dividends as a percentage of average total debt.
- (14) The percent of GCF (see note 3) less all cash dividends as a percentage of average total debt.
- (15) Average total debt divided by average of total capital plus deferred taxes (balance sheet).
- (16) Funds from operations (“FFO”), revenue minus operating expenses, plus depreciation and amortization expenses (“EBITDA”) less net interest expense less current tax expense, as a percentage of average total capital.
- (17) Average total capital divided by EBITDA (see note 7).
- (18) Cash flow from operations (“CFO”), GCF (see note 3) plus changes in operating assets and liabilities (working capital), as a percentage of average total capital.
- (19) Free operating cash flow (“FOCF”), CFO (see note 11) minus capital expenditures, as a percentage of average total capital.
- (20) Discretionary cash flow (“DCF”), FOCF (see note 12) minus cash dividends as a percentage of average total capital.
- (21) GCF (see note 3) as a percentage of average total capital.
- (22) The percent of GCF (see note 3) less all cash dividends as a percentage of average total capital.

Source of Information: Standard & Poor's, Moody's and Annual Reports

Distribution of Bond and Credit Ratings for
All Companies Contained in S&P's *Capital IQ* Database (1)

| Number of Companies In Each Grouping | S&P Bond and Credit Ratings | | | | Range of Reported Permanent Capital By Groupings (Million \$) | | |
|---|-----------------------------|--------|---------|---------|--|-------------|-------------|
| | Average | Median | Maximum | Minimum | Smallest | Average | Largest |
| | 100 | B+ | B | AA- | CCC | 61.500 | 624.227 |
| 100 | BB- | BB- | AA- | CCC+ | 969.300 | 1,293.474 | 1,602.000 |
| 100 | BB | BB | AA- | CCC- | 1,605.200 | 1,921.847 | 2,218.000 |
| 100 | BB | BB- | AA | CCC- | 2,218.000 | 2,517.606 | 2,901.400 |
| 100 | BB+ | BB | AA | CCC+ | 2,910.200 | 3,354.548 | 3,896.300 |
| 100 | BBB- | BB+ | AA+ | B- | 3,896.500 | 4,442.875 | 4,969.000 |
| 100 | BB+ | BB+ | AA- | CCC- | 4,993.900 | 5,506.942 | 6,168.400 |
| 100 | BBB- | BBB- | AA- | CCC+ | 6,171.000 | 7,002.326 | 7,971.400 |
| 100 | BBB- | BBB- | AA+ | CCC+ | 7,985.300 | 9,022.162 | 10,196.200 |
| 100 | BBB | BBB | AA- | CCC+ | 10,263.000 | 11,665.665 | 13,367.300 |
| 100 | BBB | BBB | AA- | CCC | 13,460.300 | 16,799.992 | 20,092.000 |
| 100 | BBB+ | BBB+ | AA | CCC | 20,099.600 | 24,277.878 | 29,527.500 |
| 100 | BBB+ | BBB+ | AA+ | CCC+ | 29,553.300 | 40,818.568 | 61,369.000 |
| 86 | A- | A- | AAA | BB- | 61,599.200 | 118,973.266 | 307,981.000 |
| Total | 1,386 | | | | | | |

| Number of Companies In Each Grouping | Range of Reported Permanent Capital By Groupings (Million \$) | | | Distribution of S&P Bond and Credit Ratings By Size Grouping | | | | | | | |
|---|--|-------------|-------------|--|-----|-----|-----|-----|-----|-----|----|
| | Smallest | Average | Largest | AAA | AA | A | BBB | BB | B | CCC | CC |
| 100 | 61.500 | 624.227 | 967.900 | 0% | 1% | 6% | 8% | 12% | 58% | 15% | 0% |
| 100 | 969.300 | 1,293.474 | 1,602.000 | 0% | 1% | 4% | 9% | 37% | 45% | 4% | 0% |
| 100 | 1,605.200 | 1,921.847 | 2,218.000 | 0% | 1% | 9% | 18% | 39% | 28% | 5% | 0% |
| 100 | 2,218.000 | 2,517.606 | 2,901.400 | 0% | 1% | 5% | 21% | 40% | 29% | 4% | 0% |
| 100 | 2,910.200 | 3,354.548 | 3,896.300 | 0% | 3% | 8% | 25% | 39% | 24% | 1% | 0% |
| 100 | 3,896.500 | 4,442.875 | 4,969.000 | 0% | 2% | 15% | 33% | 37% | 13% | 0% | 0% |
| 100 | 4,993.900 | 5,506.942 | 6,168.400 | 0% | 1% | 11% | 36% | 37% | 14% | 1% | 0% |
| 100 | 6,171.000 | 7,002.326 | 7,971.400 | 0% | 1% | 18% | 44% | 23% | 12% | 2% | 0% |
| 100 | 7,985.300 | 9,022.162 | 10,196.200 | 0% | 2% | 16% | 47% | 28% | 5% | 2% | 0% |
| 100 | 10,263.000 | 11,665.665 | 13,367.300 | 0% | 1% | 25% | 51% | 21% | 1% | 1% | 0% |
| 100 | 13,460.300 | 16,799.992 | 20,092.000 | 0% | 2% | 24% | 55% | 14% | 2% | 3% | 0% |
| 100 | 20,099.600 | 24,277.878 | 29,527.500 | 0% | 5% | 36% | 48% | 4% | 6% | 1% | 0% |
| 100 | 29,553.300 | 40,818.568 | 61,369.000 | 0% | 7% | 34% | 47% | 6% | 4% | 2% | 0% |
| 86 | 61,599.200 | 118,973.266 | 307,981.000 | 2% | 17% | 41% | 31% | 8% | 0% | 0% | 0% |
| 1,386 | | | | | | | | | | | |

Note: (1) Includes all non-financial public and private companies located in the US that are contained in S&P's *Capital IQ* Database that have a S&P bond or credit ratings of CC or higher and reported permanent capital for the year 2022 (as of 8/13/23). Companies were sorted based on amount of reported permanent capital and then separated into groups of 100 companies from smallest to largest.

Interest Rate Trends for
Investor-Owned Public Utility Bonds
Yearly for 2017-2021, Monthly for the Years 2022 and 2023

| <u>Years</u> | <u>Aaa Rated</u> | <u>Aa Rated</u> | <u>A Rated</u> | <u>Baa Rated</u> |
|--------------|------------------|-----------------|----------------|------------------|
| 2017 | NA | 3.82 | 4.00 | 4.38 |
| 2018 | NA | 4.09 | 4.25 | 4.67 |
| 2019 | NA | 3.61 | 3.77 | 4.19 |
| 2020 | NA | 2.79 | 3.02 | 3.39 |
| 2021 | NA | 2.97 | 3.11 | 3.36 |
| Average | NA | 3.46 | 3.63 | 4.00 |
| Jan 2022 | NA | 3.19 | 3.33 | 3.57 |
| Feb 2022 | NA | 3.56 | 3.68 | 3.95 |
| Mar 2022 | NA | 3.81 | 3.98 | 4.28 |
| Apr 2022 | NA | 4.10 | 4.32 | 4.61 |
| May 2022 | NA | 4.55 | 4.75 | 5.07 |
| Jun 2022 | NA | 4.65 | 4.86 | 5.22 |
| Jul 2022 | NA | 4.57 | 4.78 | 5.15 |
| Aug 2022 | NA | 4.54 | 4.76 | 5.09 |
| Sep 2022 | NA | 5.08 | 5.28 | 5.61 |
| Oct 2022 | NA | 5.68 | 5.88 | 6.18 |
| Nov 2022 | NA | 5.54 | 5.75 | 6.05 |
| Dec 2022 | NA | 5.06 | 5.28 | 5.57 |
| Avg 2022 | NA | 4.53 | 4.72 | 5.03 |
| Jan 2023 | NA | 4.98 | 5.20 | 5.49 |
| Feb 2023 | NA | 5.12 | 5.29 | 5.54 |
| Mar 2023 | NA | 5.24 | 5.39 | 5.68 |
| Apr 2023 | NA | 5.00 | 5.13 | 5.47 |
| May 2023 | NA | 5.24 | 5.36 | 5.71 |
| Jun 2023 | NA | 5.26 | 5.38 | 5.73 |
| Jul 2023 | NA | 5.30 | 5.41 | 5.73 |
| Aug 2023 | NA | 5.58 | 5.71 | 6.01 |
| Sep 2023 | NA | 5.72 | 5.86 | 6.15 |
| Oct 2023 | NA | 6.19 | 6.34 | 6.61 |
| Nov 2023 | NA | 5.90 | 6.05 | 6.29 |

Source of Information: MERGENT BOND RECORD

Credit Risk Spreads of
Investor-Owned Public Utility Bonds
Yearly for 2017-2021, Monthly for the Years 2022 and 2023

| | <u>Years</u> | Aa Over <u>Aaa</u> | A Over <u>Aa</u> | Baa Over <u>A</u> | Baa Over <u>Aaa</u> |
|-----|--------------|--------------------------|------------------------|-------------------------|---------------------------|
| | 2017 | NA | 0.18 | 0.38 | NA |
| | 2018 | NA | 0.16 | 0.42 | NA |
| | 2019 | NA | 0.16 | 0.42 | NA |
| | 2020 | NA | 0.23 | 0.37 | NA |
| | 2021 | NA | 0.14 | 0.25 | NA |
| | Average | NA | 0.17 | 0.37 | NA |
| Jan | 2022 | NA | 0.14 | 0.24 | NA |
| Feb | 2022 | NA | 0.12 | 0.27 | NA |
| Mar | 2022 | NA | 0.17 | 0.30 | NA |
| Apr | 2022 | NA | 0.22 | 0.29 | NA |
| May | 2022 | NA | 0.20 | 0.32 | NA |
| Jun | 2022 | NA | 0.21 | 0.36 | NA |
| Jul | 2022 | NA | 0.21 | 0.37 | NA |
| Aug | 2022 | NA | 0.22 | 0.33 | NA |
| Sep | 2022 | NA | 0.20 | 0.33 | NA |
| Oct | 2022 | NA | 0.20 | 0.30 | NA |
| Nov | 2022 | NA | 0.21 | 0.30 | NA |
| Dec | 2022 | NA | 0.22 | 0.29 | NA |
| Avg | 2022 | NA | 0.19 | 0.31 | NA |
| Jan | 2023 | NA | 0.22 | 0.29 | NA |
| Feb | 2023 | NA | 0.17 | 0.25 | NA |
| Mar | 2023 | NA | 0.15 | 0.29 | NA |
| Apr | 2023 | NA | 0.13 | 0.34 | NA |
| May | 2023 | NA | 0.12 | 0.35 | NA |
| Jun | 2023 | NA | 0.12 | 0.35 | NA |
| Jul | 2023 | NA | 0.11 | 0.32 | NA |
| Aug | 2023 | NA | 0.13 | 0.30 | NA |
| Sep | 2023 | NA | 0.14 | 0.29 | NA |
| Oct | 2023 | NA | 0.15 | 0.27 | NA |
| Nov | 2023 | NA | 0.15 | 0.24 | NA |

Source of Information: MERGENT BOND RECORD

Interest Rate Trends
Of Long-Term Treasury Constant
Yearly for 2017-2021, Monthly for the Years 2022 and 2023

| <u>Years</u> | <u>10-Year T-Bond</u> | <u>20-Year T-Bond</u> | <u>30-Year T-Bond</u> | <u>Long-term T-Bond Yield</u> |
|--------------|---------------------------|---------------------------|---------------------------|-----------------------------------|
| 2017 | 2.33 | 2.65 | 2.90 | 2.63 |
| 2018 | 2.91 | 3.02 | 3.11 | 3.01 |
| 2019 | 2.14 | 2.40 | 2.58 | 2.37 |
| 2020 | 0.89 | 1.35 | 1.56 | 1.27 |
| 2021 | 1.44 | 1.98 | 2.05 | 1.98 |
| Average | 1.94 | 2.28 | 2.44 | 2.25 |
| Jan 2022 | 1.76 | 2.15 | 2.10 | 2.13 |
| Feb 2022 | 1.93 | 2.31 | 2.25 | 2.28 |
| Mar 2022 | 2.13 | 2.51 | 2.41 | 2.46 |
| Apr 2022 | 2.75 | 2.99 | 2.81 | 2.90 |
| May 2022 | 2.90 | 3.26 | 3.07 | 3.17 |
| Jun 2022 | 3.14 | 3.48 | 3.25 | 3.37 |
| Jul 2022 | 2.90 | 3.35 | 3.10 | 3.23 |
| Aug 2022 | 2.90 | 3.35 | 3.13 | 3.24 |
| Sep 2022 | 3.52 | 3.82 | 3.56 | 3.69 |
| Oct 2022 | 3.98 | 4.28 | 4.04 | 4.16 |
| Nov 2022 | 3.89 | 4.22 | 4.00 | 4.11 |
| Dec 2022 | 3.62 | 3.87 | 3.66 | 3.77 |
| Avg 2022 | 2.95 | 3.30 | 3.12 | 3.21 |
| Jan 2023 | 3.53 | 3.81 | 3.66 | 3.74 |
| Feb 2023 | 3.75 | 3.95 | 3.80 | 3.88 |
| Mar 2023 | 3.66 | 3.94 | 3.77 | 3.86 |
| Apr 2023 | 3.46 | 3.80 | 3.68 | 3.74 |
| May 2023 | 3.57 | 3.96 | 3.86 | 3.91 |
| Jun 2023 | 3.75 | 4.04 | 3.87 | 3.96 |
| Jul 2023 | 3.90 | 4.15 | 3.96 | 4.06 |
| Aug 2023 | 4.17 | 4.46 | 4.28 | 4.37 |
| Sep 2023 | 4.38 | 4.65 | 4.47 | 4.56 |
| Oct 2023 | 4.80 | 5.13 | 4.95 | 5.04 |
| Nov 2023 | 4.50 | 4.84 | 4.66 | 4.75 |

Source of Information: Federal Reserve Bulletin

Spread in Average Long-Term Bond Yields
Versus Public Utility Bond Yields
Yearly for 2017-2021, Monthly for the Years 2022 and 2023

| <u>Spread in Average Long-Term T-Bond Yields Versus Public Utility Bonds:</u> | | | | |
|---|------------------|-----------------|----------------|------------------|
| <u>Years</u> | <u>Aaa Rated</u> | <u>Aa Rated</u> | <u>A Rated</u> | <u>Baa Rated</u> |
| 2017 | NA | 1.19 | 1.37 | 1.75 |
| 2018 | NA | 1.08 | 1.24 | 1.66 |
| 2019 | NA | 1.24 | 1.40 | 1.82 |
| 2020 | NA | 1.52 | 1.75 | 2.12 |
| 2021 | NA | 0.99 | 1.13 | 1.38 |
| Average | NA | 1.20 | 1.38 | 1.75 |
| Jan 2022 | NA | 1.07 | 1.21 | 1.45 |
| Feb 2022 | NA | 1.28 | 1.40 | 1.67 |
| Mar 2022 | NA | 1.35 | 1.52 | 1.82 |
| Apr 2022 | NA | 1.20 | 1.42 | 1.71 |
| May 2022 | NA | 1.39 | 1.59 | 1.91 |
| Jun 2022 | NA | 1.29 | 1.50 | 1.86 |
| Jul 2022 | NA | 1.35 | 1.56 | 1.93 |
| Aug 2022 | NA | 1.30 | 1.52 | 1.85 |
| Sep 2022 | NA | 1.39 | 1.59 | 1.92 |
| Oct 2022 | NA | 1.52 | 1.72 | 2.02 |
| Nov 2022 | NA | 1.43 | 1.64 | 1.94 |
| Dec 2022 | NA | 1.30 | 1.52 | 1.81 |
| Avg 2022 | NA | 1.32 | 1.52 | 1.82 |
| Jan 2023 | NA | 1.25 | 1.47 | 1.76 |
| Feb 2023 | NA | 1.25 | 1.42 | 1.67 |
| Mar 2023 | NA | 1.39 | 1.54 | 1.83 |
| Apr 2023 | NA | 1.26 | 1.39 | 1.73 |
| May 2023 | NA | 1.33 | 1.45 | 1.80 |
| Jun 2023 | NA | 1.31 | 1.43 | 1.78 |
| Jul 2023 | NA | 1.25 | 1.36 | 1.68 |
| Aug 2023 | NA | 1.21 | 1.34 | 1.64 |
| Sep 2023 | NA | 1.16 | 1.30 | 1.59 |
| Oct 2023 | NA | 1.15 | 1.30 | 1.57 |
| Nov 2023 | NA | 1.15 | 1.30 | 1.54 |

Comment: Derived from the information on pages 1 and 3 of this Schedule.

Interest Rate Trends for
Federal Funds Rate and Prime Rate
Yearly for 2017-2021, Monthly for the Years 2022 and 2023

| <u>Years</u> | <u>Fed Funds Rate</u> | <u>Prime Rate</u> |
|--------------|-------------------------------|-----------------------|
| 2017 | 1.00 | 4.10 |
| 2018 | 1.83 | 4.90 |
| 2019 | 2.16 | 5.28 |
| 2020 | 0.38 | 3.54 |
| 2021 | 0.08 | 3.25 |
| Average | 1.09 | 4.21 |
| Jan 2022 | 0.08 | 3.25 |
| Feb 2022 | 0.08 | 3.25 |
| Mar 2022 | 0.20 | 3.37 |
| Apr 2022 | 0.33 | 3.50 |
| May 2022 | 0.77 | 3.94 |
| Jun 2022 | 1.21 | 4.38 |
| Jul 2022 | 1.68 | 4.85 |
| Aug 2022 | 2.33 | 5.50 |
| Sep 2022 | 2.56 | 5.73 |
| Oct 2022 | 3.08 | 6.25 |
| Nov 2022 | 3.78 | 6.95 |
| Dec 2022 | 4.10 | 7.27 |
| Avg 2022 | 1.68 | 4.85 |
| Jan 2023 | 4.33 | 7.50 |
| Feb 2023 | 4.57 | 7.74 |
| Mar 2023 | 4.65 | 7.83 |
| Apr 2023 | 4.83 | 8.00 |
| May 2023 | 5.05 | 8.22 |
| Jun 2023 | 5.08 | 8.25 |
| Jul 2023 | 5.12 | 8.29 |
| Aug 2023 | 5.33 | 8.50 |
| Sep 2023 | 5.33 | 8.50 |
| Oct 2023 | 5.33 | 8.50 |
| Nov 2023 | 5.33 | 8.50 |

Source of Information: Federal Reserve Bulletin

Blue Chip Financial Forecasts - December 1, 2023

| | Third Quarter <u>2023</u> | Fourth Quarter <u>2023</u> | First Quarter <u>2024</u> | Second Quarter <u>2024</u> | Third Quarter <u>2024</u> | Five Quarter <u>Average</u> |
|-----------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|-----------------------------------|
| <u>Prime Rate</u> | | | | | | |
| Top Ten Average | 8.5 % | 8.5 % | 8.5 % | 8.4 % | 8.2 % | 8.4 % |
| Group Average | 8.5 | 8.5 | 8.3 | 8.1 | 7.7 | 8.2 |
| Bottom Ten Average | 8.5 | 8.4 | 8.0 | 7.6 | 7.2 | 7.9 |
| <u>Three-Month Treasury Bills</u> | | | | | | |
| Top Ten Average | 5.6 | 5.5 | 5.5 | 5.3 | 5.0 | 5.4 |
| Group Average | 5.5 | 5.4 | 5.1 | 4.8 | 4.5 | 5.1 |
| Bottom Ten Average | 5.4 | 5.2 | 4.7 | 4.1 | 3.7 | 4.6 |
| <u>Ten Year Treasury Notes</u> | | | | | | |
| Top Ten Average | 4.8 | 4.7 | 4.6 | 4.6 | 4.5 | 4.6 |
| Group Average | 4.6 | 4.5 | 4.3 | 4.2 | 4.1 | 4.3 |
| Bottom Ten Average | 4.4 | 4.3 | 4.0 | 3.8 | 3.7 | 4.0 |
| <u>Thirty Year Treasury Bonds</u> | | | | | | |
| Top Ten Average | 4.9 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 |
| Group Average | 4.8 | 4.7 | 4.5 | 4.5 | 4.4 | 4.6 |
| Bottom Ten Average | 4.6 | 4.5 | 4.3 | 4.1 | 4.0 | 4.3 |
| <u>Aaa-Rated Corporate Bonds</u> | | | | | | |
| Top Ten Average | 5.7 | 5.6 | 5.6 | 5.6 | 5.5 | 5.6 |
| Group Average | 5.5 | 5.5 | 5.3 | 5.3 | 5.1 | 5.3 |
| Bottom Ten Average | 5.3 | 5.3 | 5.1 | 4.9 | 4.7 | 5.1 |
| <u>Baa-Rated Corporate Bonds</u> | | | | | | |
| Top Ten Average | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 |
| Group Average | 6.4 | 6.4 | 6.4 | 6.3 | 6.2 | 6.3 |
| Bottom Ten Average | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |

Derived Public Utility Bond Yield Forecasts Based on Aaa and Baa Corporate Yields

Aa-Rated Public Utility Bonds

| | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|
| Top Ten Average | 5.5 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 |
| Group Average | 6.0 | 6.0 | 5.9 | 5.9 | 5.7 | 5.9 |
| Bottom Ten Average | 5.0 | 5.0 | 4.9 | 4.8 | 4.7 | 4.9 |

A-Rated Public Utility Bonds

| | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|
| Top Ten Average | 5.6 | 5.6 | 5.6 | 5.6 | 5.5 | 5.6 |
| Group Average | 6.2 | 6.2 | 6.1 | 6.0 | 5.9 | 6.1 |
| Bottom Ten Average | 5.2 | 5.2 | 5.1 | 5.0 | 4.9 | 5.1 |

Baa-Rated Public Utility Bonds

| | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|
| Top Ten Average | 5.9 | 5.9 | 5.9 | 5.9 | 5.8 | 5.9 |
| Group Average | 6.5 | 6.5 | 6.4 | 6.3 | 6.2 | 6.4 |
| Bottom Ten Average | 5.5 | 5.5 | 5.4 | 5.3 | 5.2 | 5.4 |

Settled Yields on Treasury Bond
Future Contracts
Traded on the Chicago Board of Trade
at the Close of December 18, 2023

| <u>Delivery Date</u> | Treasury Bonds <u>(CBOT)</u> |
|----------------------|------------------------------------|
| Dec-23 | 4.143 % |
| Mar-24 | 4.113 |
| Jun-24 | <u>4.057</u> |
| Average | <u><u>4.105</u></u> % |

Source of Information: Chicago Board of Trade

Market Value Discounted Cash Flow for
The Water Group Followed by Analysts

| | Water Group Followed by <u>Analysts</u> |
|----------------------------|---|
| Dividend Yield(1) | 2.3 % |
| Growth in Dividends(2) | <u>0.1</u> |
| Adjusted Dividend Yield | 2.4 |
| Stock Appreciation(3) | <u>6.3</u> |
| Market Value DCF Cost Rate | <u><u>8.7 %</u></u> |

- Notes: (1) Developed on page 2 of this Schedule.
(2) Equal to one-half the assumed growth in value.
(3) As explained in the direct testimony, the growth in value is supported by the information shown on Schedules 13 and 14.

Market Value Dividend Yield for
the Water Group Followed by Analysts
For the Twelve Months Ended November 2023

| | <u>Recent Dividend Yields(1)</u> | <u>Longer Term Dividend Yields(2)</u> | <u>Average Yields</u> |
|---|--|---|---------------------------|
| <u>Water Group Followed by Analysts</u> | | | |
| American States Water Co | 2.1 % | 1.9 % | |
| American Water Works Co Inc | 2.3 | 2.0 | |
| California Water Service Gp | 2.1 | 1.9 | |
| Essential Utilities, Inc. | 3.5 | 2.9 | |
| Middlesex Water Co | 2.0 | 1.7 | |
| SJW Corp | 2.4 | 2.1 | |
| York Water Co | <u>2.2</u> | <u>1.9</u> | |
| Average | <u>2.4 %</u> | <u>2.1 %</u> | <u>2.3 %</u> |

Notes: (1) Average of the high and the low dividend yield for the month of November 2023.

(2) Average of the high and the low dividend yield for each of the twelve months ended November 2023.

Source of Information: S&P Capital IQ

Development of Long Term Projected Growth in Value
Based Upon Growth Over The Next Five Years
For the Water Group Followed by Analysts

| | <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> | <u>G</u> | <u>H</u> |
|---|---------------------------------------|-----------------------------|--------------------------------|---------------------------------------|---------------------------------------|---|---------------------------------|---------------------------------|
| | Analysts' Projected Growth in EPS | | | | Other Projected Growth | | | |
| | First Call EPS <u>Growth</u> | S&P EPS <u>Growth</u> | ZACK's EPS <u>Growth</u> | Value Line EPS <u>Growth</u> | Value Line DPS <u>Growth</u> | Value Line Cash Flow <u>Growth</u> | Average EPS <u>Growth</u> | Average All <u>Growth</u> |
| <u>Water Group Followed by Analysts</u> | | | | | | | | |
| American States Water Co | 4.2 % | 14.0 % | 6.3 % | 6.5 % | 8.5 % | 7.0 % | 7.8 % | 7.8 % |
| American Water Works Co Inc | 7.8 | 7.8 | 7.8 | 3.0 | 8.5 | 3.0 | 6.6 | 6.3 |
| California Water Service Gp | 10.8 | 8.0 | NA | 6.5 | 6.5 | 2.0 | 8.4 | 6.8 |
| Essential Utilities, Inc. | 5.2 | 5.9 | 5.6 | 7.5 | 8.0 | 6.0 | 6.0 | 6.4 |
| Middlesex Water Co | 2.7 | NA | NA | 5.0 | 6.5 | 3.0 | 3.9 | 4.3 |
| SJW Corp | 6.1 | 7.0 | NA | 6.5 | 5.0 | -1.5 | 6.5 | 4.6 |
| York Water Co | 4.9 | NA | NA | NA | NA | NA | 4.9 | 4.9 |
| Average | <u>6.0 %</u> | <u>8.5 %</u> | <u>6.6 %</u> | <u>5.8 %</u> | <u>7.2 %</u> | <u>3.3 %</u> | <u>6.3 %</u> | <u>5.9 %</u> |

| | Historical 5-Year Growth in EPS | | | |
|---|---------------------------------------|--------------------------------|---------------------------------------|---------------------------------|
| | First Call EPS <u>Growth</u> | ZACK's EPS <u>Growth</u> | Value Line EPS <u>Growth</u> | Average EPS <u>Growth</u> |
| <u>Water Group Followed by Analysts</u> | | | | |
| American States Water Co | 10.5 % | 6.2 % | 6.5 % | 7.7 % |
| American Water Works Co Inc | 8.3 | 8.0 | 15.0 | 10.4 |
| California Water Service Gp | -7.6 | 7.1 | 11.0 | 3.5 |
| Essential Utilities, Inc. | 1.6 | 5.3 | 3.5 | 3.5 |
| Middlesex Water Co | -0.4 | 8.7 | 11.0 | 6.4 |
| SJW Corp | 14.1 | 0.2 | -2.0 | 4.1 |
| York Water Co | 8.2 | 7.1 | 0.0 | 5.1 |
| Average | <u>5.0 %</u> | <u>6.1 %</u> | <u>6.4 %</u> | <u>5.8 %</u> |

Source of Information: Value Line Investment Survey, 10/6/23; S&P Capital IQ 12/20/23; FirstCall 12/20/23; and Zacks Investment Research 12/20/23

Recent Payout Ratios,
ROEs, P-E Multiples, Market/Book Multiples, and Market Value
For the Water Group Followed by Analysts

| | Current Dividend <u>Payout</u> | Current Return on Equity | PE Mult | Market to Book Mult | Current Market Value (Mill \$) |
|---|--------------------------------------|-----------------------------------|-------------|---------------------------|---|
| <u>Water Group Followed by Analysts</u> | | | | | |
| American States Water Co | 50 | 16.1 | 25.3 | 3.91 | 2,954.749 |
| American Water Works Co Inc | 56 | 10.5 | 27.4 | 2.65 | 25,669.907 |
| California Water Service Gp | 90 | 4.9 | 44.7 | 2.10 | 2,918.445 |
| Essential Utilities, Inc. | 65 | 8.5 | 20.1 | 1.68 | 9,727.435 |
| Middlesex Water Co | 58 | 9.3 | 30.4 | 2.75 | 1,137.848 |
| SJW Corp | 52 | 8.0 | 22.9 | 1.76 | 2,096.082 |
| York Water Co | <u>55</u> | <u>10.1</u> | <u>26.0</u> | <u>2.56</u> | <u>545.373</u> |
| Average | <u>61</u> | <u>9.6</u> | <u>28.1</u> | <u>2.49</u> | <u>6,435.691</u> |

Source of Information: S&P Capital IQ, spot date of 11/30/2023

Value Line Projected ROE Based on Year-End and Average,
Dividend Payout Ratio, and Common Equity Ratio for
The Water Group Followed by Analysts for 2026 - 2028

| | Value Line Projected <u>ROE</u> | Projected Average ROE <u>(1)</u> | Value Line Projected Dividend <u>Payout</u> | Value Line Projected Common Equity <u>Ratio</u> |
|---|---------------------------------------|---|--|---|
| <u>Water Group Followed by Analysts</u> | | | | |
| American States Water Co | 14.0 % | 14.4 % | 67.6 % | 50.0 % |
| American Water Works Co Inc | 10.5 | 10.9 | 62.3 | 42.5 |
| California Water Service Gp | 9.5 | 9.6 | 49.1 | 62.0 |
| Essential Utilities, Inc. | 9.0 | 9.3 | 70.2 | 44.0 |
| Middlesex Water Co | 12.5 | 12.6 | 53.3 | 59.5 |
| SJW Corp | 7.5 | 7.6 | 55.4 | 56.0 |
| York Water Co | <u>NA</u> | <u>NA</u> | <u>NA</u> | <u>NA</u> |
| Average | <u>10.5</u> % | <u>10.7</u> % | <u>59.7</u> % | <u>52.3</u> % |
| Median | | <u>10.3</u> % | | |

Notes: (1) Value Line ROE, which is a year-end ROE, is converted to average ROE by the factor derived from the following formula: $2((1+g)/(2+g))$, where "g" is the rate of growth in common equity.

Source of Information: Value Line Investment Survey, 10/6/23

Illustration of the
Effect of Market-To-Book Ratio on Market Return

| <u>Ln #</u> | <u>Situation 1</u> | <u>Situation 2</u> | <u>Situation 3</u> |
|--------------------------|--------------------|--------------------|--------------------|
| 1 M/B Ratio | 50% | 100% | 200% |
| 2 Market Purchase Price | \$25.00 | \$50.00 | \$100.00 |
| 3 Book Value | \$50.00 | \$50.00 | \$50.00 |
| 4 DCF Return | 10.0% | 10.0% | 10.0% |
| 5 DCF Dollar Return | \$5.00 | \$5.00 | \$5.00 |
| 6 Dividend Yield | 5.0% | 5.0% | 5.0% |
| 7 DPS | \$1.25 | \$2.50 | \$5.00 |
| 8 Dollar Growth in Value | \$3.75 | \$2.50 | \$0.00 |
| 9 Market Sale Price | \$28.75 | \$52.50 | \$100.00 |
| 10 Total Market Return | 20.0% | 10.0% | 5.0% |

"The simple numerical illustration....demonstrates the impact of market-to-book ratios on the DCF market return....The DCF cost rate of 10%, made up of a 5% dividend yield and a 5% growth rate, is applied to the book value rate base of \$50 to produce \$5.00 of earnings. Of the \$5.00 of earnings, the full \$5.00 are required for dividends to produce a dividend yield of 5.0% on a stock price of \$100.00, and no dollars are available for growth. The investor's return is therefore only 5% versus his required return of 10%. A DCF cost rate of 10%, which implies \$10.00 of earnings, translates to only \$5.00 of earnings on book value, or a 5% return....Therefore, the DCF cost rate understates the investor's required return when stock prices are well above book, as is the case presently."

The above illustration is taken from Roger A Morin, Regulatory Finance - Utilities' Cost of Capital, Public Utility Reports, Inc., 1994, pp. 236-237.

Differences in Book Value and Market Values for the
Water Group Followed by Analysts

| | Recent Book Value Capitalization Ratios <u>(6/30/23)</u> | Recent Market Value Capitalization Ratios <u>(11/30/23)</u> | Average Book Value of Common Equity <u>(Millions)</u> | Average Market Value of Common Equity <u>(Millions)</u> | Difference in Market Value and Book Value Common Equity <u></u> |
|--|--|---|---|---|--|
| <u>Water Group Followed by Analysts:</u> | | | | | |
| Long Term Debt | 50.4 % | 30.3 % | | | |
| Preferred Stock | 0.1 | 0.0 | | | |
| Common Equity | <u>49.5</u> | <u>69.7</u> | <u>\$2,752.431</u> | <u>\$6,435.691</u> | <u>\$3,683.260</u> |
| Total | <u>100.0 %</u> | <u>100.0 %</u> | | | |
| | | | Difference in Common Equity Ratio | | <u>20.2%</u> |

Water Group Followed by Analysts
Financial Risk Adjustment Using the "Hamada Models"

| Original Hamada Formulas | | | | | | Harris-Pringle Formulas | | | | | | | |
|---|--------------------------|--------------------|------------------|-------------------|-------------------------------|--|--------------------------|--------------------|------------------|-------------------|-------------------------------|--------------------------|--|
| <u>Market Value @ (11/30/23)</u> | | | | | | <u>Market Value @ (11/30/23)</u> | | | | | | | |
| Line No. | <u>DEBT</u> (D) | <u>PREF</u> (P) | <u>CE</u> (E) | <u>TAX</u> (t) | <u>BETA</u> (BI) | Line No. | <u>DEBT</u> (D) | <u>PREF</u> (P) | <u>CE</u> (E) | <u>TAX</u> (t) | <u>BETA</u> (BI) | <u>DEBT BETA</u> (Bd) | |
| 1. | | | | | | 1. | | | | | | | |
| 2. | 30.3% | 0.0% | 69.7% | 26.14% | 0.70 | 2. | 30.3% | 0.0% | 69.7% | 26.14% | 0.70 | 0.34 | |
| 3. | BI = Bu (1+(1-t)D/E+P/E) | | | | | 3. | BI = Bu + (Bu - Bd)(D/E) | | | | | | |
| 4. | | 1-t = 0.7386 | | | | 4. | | BI = 0.70 | | | | | |
| 5. | | D/E = 0.4347 | | | | 5. | | Bd = 0.34 | | | | | |
| 6. | | P/E = 0.0000 | | | | 6. | | D/E = 0.4347 | | | | | |
| 7. | | BI = Bu * | | 1.3211 | | 7. | BI + Bd(D/E) = 0.8478 | | | | | | |
| 8. | | Bu = 0.53 | | | | 8. | 1 + D/E = 1.4347 | | | | | | |
| 9. | | | | | | 9. | Bu = 0.59 | | | | | | |
| <u>Book Value @ (6/30/23)</u> | | | | | | <u>Book Value @ (6/30/23)</u> | | | | | | | |
| | <u>DEBT</u> (D) | <u>PREF</u> (P) | <u>CE</u> (E) | <u>TAX</u> (t) | <u>BETA UNLEVERED</u> (Bu) | | <u>DEBT</u> (D) | <u>PREF</u> (P) | <u>CE</u> (E) | | <u>BETA UNLEVERED</u> (Bu) | | |
| 10. | | | | | | 10. | | | | | | | |
| 11. | | | | | | 11. | | | | | | | |
| 12. | 50.40% | 0.10% | 49.50% | 26.140% | 0.53 | 12. | 50.40% | 0.10% | 49.50% | | 0.59 | | |
| 13. | BI = Bu (1+(1-t)D/E+P/E) | | | | | 13. | BI = Bu + (Bu - Bd)(D/E) | | | | | | |
| 14. | | 1-t = 0.7386 | | | | 14. | | Bu = 0.59 | | | | | |
| 15. | | D/E = 1.0182 | | | | 15. | | Bd = 0.34 | | | | | |
| 16. | | P/E = 0.0020 | | | | 16. | | Bu - Bd = 0.2509 | | | | | |
| 17. | | BI = Bu * | | 1.7540 | | 17. | D/E = 1.0182 | | | | | | |
| 18. | | BI = 0.93 | | | | 18. | BI = 0.85 | | | | | | |
| <u>Cost Adjustment Based on Original Hamada</u> | | | | | | <u>Cost Adjustment Based on Harris-Pringle</u> | | | | | | | |
| 19. | Book Beta (Raw) | = | 0.93 | | | | 19. | Book Beta (Raw) | = | 0.85 | | | |
| 20. | Market Beta (Raw) | = | <u>0.70</u> | | | | 20. | Market Beta (Raw) | = | <u>0.70</u> | | | |
| 21. | Beta difference | = | 0.23 | | | | 21. | Beta difference | = | 0.15 | | | |
| 22. | Risk premium | = | <u>5.0</u> | | | | 22. | Risk premium | = | <u>5.0</u> | | | |
| 23. | Risk adjustment | = | <u>1.15</u> | | | | 23. | Risk adjustment | = | <u>0.73</u> | | | |

Default Spread for
Aaa Rated Corporate Bonds and A Rated Investor-Owned Public Utility Bonds
Yearly for 2017-2021, Monthly for the Years 2022 and 2023

| | <u>Years</u> | <u>Corporate Aaa Rated</u> | <u>Public Utility A Rated</u> | <u>A Over Aaa</u> |
|-----|--------------|--------------------------------|-----------------------------------|---------------------------|
| | 2017 | 3.74 | 4.00 | 0.25 |
| | 2018 | 3.93 | 4.25 | 0.32 |
| | 2019 | 3.39 | 3.77 | 0.38 |
| | 2020 | 2.50 | 3.02 | 0.52 |
| | 2021 | 2.71 | 3.11 | 0.40 |
| | Average | 3.25 | 3.63 | 0.37 |
| Jan | 2022 | 3.07 | 3.33 | 0.26 |
| Feb | 2022 | 3.25 | 3.68 | 0.43 |
| Mar | 2022 | 3.43 | 3.98 | 0.55 |
| Apr | 2022 | 3.76 | 4.32 | 0.56 |
| May | 2022 | 4.13 | 4.75 | 0.62 |
| Jun | 2022 | 4.24 | 4.86 | 0.62 |
| Jul | 2022 | 4.06 | 4.78 | 0.72 |
| Aug | 2022 | 4.07 | 4.76 | 0.69 |
| Sep | 2022 | 4.59 | 5.28 | 0.69 |
| Oct | 2022 | 5.10 | 5.88 | 0.78 |
| Nov | 2022 | 4.90 | 5.75 | 0.85 |
| Dec | 2022 | 4.43 | 5.28 | 0.85 |
| Avg | 2022 | 4.09 | 4.72 | 0.63 |
| Jan | 2023 | 4.40 | 5.20 | 0.80 |
| Feb | 2023 | 4.56 | 5.29 | 0.73 |
| Mar | 2023 | 4.60 | 5.39 | 0.79 |
| Apr | 2023 | 4.47 | 5.13 | 0.66 |
| May | 2023 | 4.67 | 5.36 | 0.69 |
| Jun | 2023 | 4.65 | 5.38 | 0.73 |
| Jul | 2023 | 4.66 | 5.41 | 0.75 |
| Aug | 2023 | 4.95 | 5.71 | 0.76 |
| Sep | 2023 | 5.13 | 5.86 | 0.73 |
| Oct | 2023 | 5.61 | 6.34 | 0.73 |
| Nov | 2023 | 5.28 | 6.05 | 0.77 |

Source of Information: MERGENT BOND RECORD

Market Value CAPM for
The Water Group Followed by Analysts

Water Group
Followed by
Analysts

Estimation Based Upon Historical Information

| | |
|------------------------------|----------------------|
| Market Premium(1) | 7.5 % |
| x Beta(2) | <u>0.82</u> |
| Risk Adjusted Market Premium | 6.2 |
| Size Adjustment Premium(2) | 0.7 |
| Plus Risk Free Rate(1) | <u>4.1</u> |
| Market Value CAPM Cost Rate | <u><u>11.0 %</u></u> |

Estimation Based Upon Projected Information

| | |
|------------------------------|----------------------|
| Market Premium(1) | 10.7 % |
| x Beta(2) | <u>0.82</u> |
| Risk Adjusted Market Premium | 8.8 |
| Size Adjustment Premium(2) | 0.7 |
| Plus Risk Free Rate(1) | <u>4.1</u> |
| Market Value CAPM Cost Rate | <u><u>13.6 %</u></u> |

| |
|-----------------------------|
| Market Value CAPM is: 11.0% |
|-----------------------------|

Notes: (1) Developed on page 2 of this Schedule.
(2) Developed on page 4 of this Schedule.

Development of Market Premiums for Use in a CAPM Model

Estimated Based Upon Projected Information

Value Line Summary and Index Project Return

| | |
|--|----------------|
| Date | 11/17/23 |
| Market's Price Appreciation Next 3-5 Years (1) | <u>65</u> % |
| Annual Price Appreciation (1) | 13.30 % |
| Forecasted Market Dividend Yield (1) | <u>2.40</u> |
| Value Line's Annual Total Return (1) | <u>15.70</u> % |

S&P 500 Projected Market Return

| | |
|---|----------------|
| S&P 500's Dividend Yield (2) | 1.52 % |
| S&P 500's Projected Growth Rate in EPS (3) | <u>12.33</u> |
| S&P 500 Projected Market Return (4) | <u>13.94</u> % |
| Average Projected Total Market Return (5) | 14.82 % |
| Less Risk Free Rate (6) | <u>4.10</u> |
| Estimated Market Premium Based Upon Projected Information | <u>10.72</u> % |

Estimated Based Upon Historical Information

| | |
|--|---------------|
| Estimated Market Premium Based Upon Historical Information (7) | <u>7.50</u> % |
|--|---------------|

See next page of this Schedule for Notes.

CAPMThe Water Group Followed by Analysts

- Notes: (1) A projected market premium is based upon the projected market return rate derived from the Value Line Summary and Index for the various dates shown. For example, Value Line projects (Nov-23) that the market will appreciate in price 65% over the next three to five years. Using a four-year midpoint estimate, Value Line's appreciation potential equates to 13.3% annually ($[1.65]^{.25}$). Additionally, Value Line estimates the market will have a dividend yield of 2.4%. Combining the market dividend yield of 2.4% with the market appreciation results in a projected market return rate of 15.7% (13.3% + 2.4%).
- (2) Barron's Market Lab (Aug. 7, 2023) reports S&P 500's dividend yield of 1.52%.
- (3) S&P Global Market Intelligence, S&P Capital IQ (Aug. 9, 2023) reports projected 5-year EPS growth rate for the S&P 500 of 12.33%.
- (4) Equal to S&P 500 dividend yield adjusted for one-half the assumed growth in value, plus the assumed growth in value (i.e., $[D_0 \times (1 + (0.5 \times g))] + g$).
- (5) Average of Value Line 's projected total market return and projected total market return for the S&P
- (6) As discussed in the direct testimony, the risk-free rate is 4.1%.
- (7) The historical market premium is based upon studies conducted by Ibbotson Associates concerning asset returns. Ibbotson Associates' asset return studies are the most noted asset return rate studies available today. The results are widely disseminated throughout the investment public. Ibbotson Associates' long-term common stock total market return is 12.33% which, when reduced by the long-term historic risk-free rate of 4.87% results in a market premium of 7.5% (12.33% - 4.87%).

Recent Market Values and
Beta Adjusted Ibbotson Associates Size Premiums For
The Water Group Followed by Analysts

| | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> |
|---|---|----------------------------|--------------------|-----------------------------|------------------|-----------------------|----------------------------|---|
| | Recent Market Value <u>11/30/23</u> (Mill \$) | Market Quartile Name | Market Quartile | Quartile Size Premium | Quartile Beta | Value Line Beta | Size Premium Ratio * | Adjusted Quartile Size Premium |
| <u>Water Group Followed by Analysts</u> | | | | | | | | |
| American States Water Co | \$2,954.749 | Mid-Cap | 2 | 2.48 | 1.13 | 0.70 | 25% | 0.62 |
| American Water Works Co Inc | 25,669.907 | Large-Cap | 1 | 0.00 | 1.00 | 0.95 | 0% | 0.00 |
| California Water Service Gp | 2,918.445 | Mid-Cap | 2 | 2.48 | 1.13 | 0.70 | 25% | 0.62 |
| Essential Utilities, Inc. | 9,727.435 | Mid-Cap | 2 | 2.48 | 1.13 | 1.00 | 25% | 0.62 |
| Middlesex Water Co | 1,137.848 | Low-Cap | 3 | 3.95 | 1.23 | 0.75 | 25% | 0.99 |
| SJW Corp | 2,096.082 | Low-Cap | 3 | 3.95 | 1.23 | 0.85 | 25% | 0.99 |
| York Water Co | 545.373 | <u>Low-Cap</u> | <u>3</u> | <u>3.95</u> | <u>1.23</u> | <u>0.80</u> | <u>25%</u> | <u>0.99</u> |
| Average | | <u>Mid-Cap</u> | <u>2</u> | <u>2.48</u> | <u>1.13</u> | <u>0.82</u> | <u>21%</u> | <u>0.69</u> |

* - Estimated based on differences in raw betas and credit spreads for the comparison companies and the quartile companies.

Source of Information: 2022 SBBI Yearbook, Stocks, Bonds, Bills, and Inflation, and Value Line

Market Value Risk Premium
For the Water Group Followed by Analysts

| | Water Group Followed by <u>Analysts</u> |
|---|---|
| Prospective Public Utility Bond Yields(1) | 5.6 % |
| Estimated Risk Premium(2) | <u>5.0</u> |
| Market Value Risk Premium Indicated Cost Rate | <u><u>10.6</u></u> % |

- Notes: (1) Based upon the current and prospective long-term debt cost rates, it is reasonable to expect that if the comparable group (i.e., Water Group) issued new long-term bonds, it would both be priced to yield about 5.6% based upon credit profiles of A for the Water Group.
- (2) A 5% risk premium is concluded for the Group after reviewing the tabulation of risk spreads shown on pages 2, 3, 4 and 5 of this Schedule.

Annual Total Returns and Risk Premiums of
S&P Public Utility Stocks and Bonds
for the Years 2003-2022, 1993-2022, 1983-2022, 1973-2022, 1963-2022, 1953-2022 and 1928-2022

| Annual Total Returns | | | | | | | |
|--------------------------------|-------------------------|-------------------|----------------------|-------------|--------|--------|--------|
| Periods | Public Utility Stock | L-Term T-Bonds | Public Utility Bonds | | | | |
| | | | AAA | AAA & AA | AA | A | BBB |
| Average Annual Rates of Return | | | | | | | |
| 2003 to 2022 | 0.1370 | 0.0519 | 0.0000 | 0.0650 | 0.0650 | 0.0638 | 0.0745 |
| 1993 to 2022 | 0.1169 | 0.0693 | 0.0877 | 0.0760 | 0.0764 | 0.0747 | 0.0809 |
| 1983 to 2022 | 0.1358 | 0.0861 | 0.1225 | 0.0941 | 0.0946 | 0.0957 | 0.1021 |
| 1973 to 2022 | 0.1297 | 0.0793 | 0.1003 | 0.0878 | 0.0886 | 0.0891 | 0.0952 |
| 1963 to 2022 | 0.1170 | 0.0702 | 0.0799 | 0.0767 | 0.0775 | 0.0782 | 0.0838 |
| 1953 to 2022 | 0.1219 | 0.0625 | 0.0674 | 0.0685 | 0.0692 | 0.0702 | 0.0757 |
| 1928 to 2022 | 0.1112 | 0.0542 | 0.0594 | 0.0625 | 0.0635 | 0.0656 | 0.0725 |
| Average Risk Premiums | | | | | | | |
| 2003 to 2022 | | 0.0851 | 0.1370 | 0.0720 | 0.0720 | 0.0732 | 0.0625 |
| 1993 to 2022 | | 0.0476 | 0.0292 | 0.0410 | 0.0405 | 0.0422 | 0.0361 |
| 1983 to 2022 | | 0.0497 | 0.0133 | 0.0417 | 0.0412 | 0.0400 | 0.0337 |
| 1973 to 2022 | | 0.0468 | 0.0372 | 0.0403 | 0.0395 | 0.0389 | 0.0332 |
| 1963 to 2022 | | 0.0468 | 0.0372 | 0.0403 | 0.0395 | 0.0389 | 0.0332 |
| 1953 to 2022 | | 0.0594 | 0.0544 | 0.0534 | 0.0527 | 0.0517 | 0.0461 |
| 1928 to 2022 | | 0.0570 | 0.0518 | 0.0487 | 0.0477 | 0.0456 | 0.0387 |

Annual Total Returns, Annual Income Returns and Risk Premiums of
S&P Public Utility Stocks and Bonds
for the Years 2003-2022, 1993-2022, 1983-2022, 1973-2022, 1963-2022, 1953-2022 and 1928-2022

| <u>Periods</u> | <u>Annual Total Returns Public Utility Stock</u> | <u>Annual Income Returns</u> | | | | | |
|--------------------------------|--|------------------------------|-----------------------------|-------------------------|-----------|----------|------------|
| | | <u>L-Term T-Bonds</u> | <u>Public Utility Bonds</u> | | | | |
| | | | <u>AAA</u> | <u>AAA & AA</u> | <u>AA</u> | <u>A</u> | <u>BBB</u> |
| <u>Average Rates of Return</u> | | | | | | | |
| 2003 to 2022 | 0.1370 | 0.0345 | 0.0000 | 0.0468 | 0.0468 | 0.0486 | 0.0535 |
| 1993 to 2022 | 0.1169 | 0.0441 | 0.0748 | 0.0564 | 0.0565 | 0.0582 | 0.0626 |
| 1983 to 2022 | 0.1358 | 0.0563 | 0.0890 | 0.0681 | 0.0684 | 0.0704 | 0.0745 |
| 1973 to 2022 | 0.1297 | 0.0639 | 0.0930 | 0.0749 | 0.0755 | 0.0778 | 0.0822 |
| 1963 to 2022 | 0.1170 | 0.0621 | 0.0847 | 0.0726 | 0.0732 | 0.0753 | 0.0795 |
| 1953 to 2022 | 0.1219 | 0.0582 | 0.0752 | 0.0677 | 0.0682 | 0.0703 | 0.0742 |
| 1928 to 2022 | 0.1112 | 0.0499 | 0.0609 | 0.0589 | 0.0595 | 0.0621 | 0.0668 |
| <u>Average Risk Premiums</u> | | | | | | | |
| 2003 to 2022 | | 0.1025 | 0.1370 | 0.0902 | 0.0902 | 0.0884 | 0.0835 |
| 1993 to 2022 | | 0.0728 | 0.0421 | 0.0605 | 0.0604 | 0.0587 | 0.0544 |
| 1983 to 2022 | | 0.0794 | 0.0468 | 0.0677 | 0.0674 | 0.0654 | 0.0613 |
| 1973 to 2022 | | 0.0550 | 0.0323 | 0.0444 | 0.0439 | 0.0417 | 0.0375 |
| 1963 to 2022 | | 0.0550 | 0.0323 | 0.0444 | 0.0439 | 0.0417 | 0.0375 |
| 1953 to 2022 | | 0.0637 | 0.0467 | 0.0541 | 0.0536 | 0.0515 | 0.0476 |
| 1928 to 2022 | | 0.0613 | 0.0503 | 0.0523 | 0.0517 | 0.0491 | 0.0444 |

Annual Total Returns, Annual Income Returns and Risk Premiums of
S&P Public Utility Stocks and Bonds
For the 47 Years of the Lowest Interest Rate Environment and the 48 Years of the Highest Interest Rate Environment
For The Years 1928-2022

| |
|---|
| Current Interest Rate Environment: 4.1% |
|---|

| Periods | Public Utility Stock | L-Term T-Bonds | Public Utility Bonds | | | | |
|---------|-------------------------|-------------------|----------------------|-------------|----|---|-----|
| | | | AAA | AAA & AA | AA | A | BBB |

Annual Total Returns

Low Interest Rate Environment:

47 Years of the Lowest Interest Rates, Ranging from 1.4% to 4.0% with an Average Rate of 2.8%

Average Rates of Return

| | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|
| 0.1120 | 0.0257 | 0.0366 | 0.0431 | 0.0442 | 0.0490 | 0.0607 |
|--------|--------|--------|--------|--------|--------|--------|

Average Risk Premiums

| | | | | | | |
|--|--------|--------|--------|--------|--------|--------|
| | 0.0862 | 0.0754 | 0.0689 | 0.0677 | 0.0630 | 0.0513 |
|--|--------|--------|--------|--------|--------|--------|

High Interest Rate Environment:

48 Years of the Highest Interest Rates, Ranging from 4.1% to 13.5% with an Average Rate of 7.1%

Average Risk Premiums

| | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|
| 0.1104 | 0.0821 | 0.0788 | 0.0815 | 0.0823 | 0.0819 | 0.0840 |
|--------|--------|--------|--------|--------|--------|--------|

Average Risk Premiums

| | | | | | | |
|--|--------|--------|--------|--------|--------|--------|
| | 0.0284 | 0.0317 | 0.0289 | 0.0281 | 0.0285 | 0.0264 |
|--|--------|--------|--------|--------|--------|--------|

Annual Income Returns

Low Interest Rate Environment:

47 Years of the Lowest Interest Rates, Ranging from 1.4% to 4.0% with an Average Rate of 2.8%

Average Rates of Return

| | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|
| 0.1120 | 0.0283 | 0.0340 | 0.0364 | 0.0370 | 0.0399 | 0.0457 |
|--------|--------|--------|--------|--------|--------|--------|

Average Risk Premiums

| | | | | | | |
|--|--------|--------|--------|--------|--------|--------|
| | 0.0837 | 0.0780 | 0.0756 | 0.0749 | 0.0721 | 0.0663 |
|--|--------|--------|--------|--------|--------|--------|

High Interest Rate Environment:

48 Years of the Highest Interest Rates, Ranging from 4.1% to 13.5% with an Average Rate of 7.1%

Average Risk Premiums

| | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|
| 0.1104 | 0.0709 | 0.0837 | 0.0808 | 0.0815 | 0.0838 | 0.0875 |
|--------|--------|--------|--------|--------|--------|--------|

Average Risk Premiums

| | | | | | | |
|--|--------|--------|--------|--------|--------|--------|
| | 0.0395 | 0.0267 | 0.0296 | 0.0289 | 0.0267 | 0.0229 |
|--|--------|--------|--------|--------|--------|--------|

Annual Total Returns of
S&P Public Utility Stocks and Bonds
for the Years 1928-2022

| Years | Annual Total Returns | | | | | | |
|-------|--------------------------|-------------------|----------------------|-------------|---------|---------|---------|
| | Public Utility Stocks | L-Term T-Bonds | Public Utility Bonds | | | | BBB |
| | | | AAA | AAA & AA | AA | A | |
| 1928 | 0.5431 | -0.0030 | 0.0370 | 0.0388 | 0.0406 | 0.0372 | 0.0392 |
| 1929 | 0.1376 | 0.0410 | 0.0209 | 0.0193 | 0.0178 | 0.0163 | -0.0076 |
| 1930 | -0.2149 | 0.0509 | 0.0917 | 0.0892 | 0.0869 | 0.0820 | 0.0378 |
| 1931 | -0.3193 | -0.0782 | 0.0058 | -0.0059 | -0.0171 | -0.0608 | -0.1089 |
| 1932 | -0.0724 | 0.1736 | 0.1073 | 0.1037 | 0.1003 | 0.0685 | 0.0570 |
| 1933 | -0.2170 | 0.0090 | 0.0142 | -0.0145 | -0.0401 | -0.0686 | -0.0601 |
| 1934 | -0.1743 | 0.0962 | 0.1712 | 0.2000 | 0.2272 | 0.3264 | 0.4593 |
| 1935 | 0.6914 | 0.0610 | 0.1053 | 0.1243 | 0.1427 | 0.1760 | 0.2885 |
| 1936 | 0.2357 | 0.0691 | 0.0783 | 0.0916 | 0.1046 | 0.1079 | 0.1078 |
| 1937 | -0.3337 | -0.0091 | 0.0290 | 0.0323 | 0.0357 | 0.0272 | -0.0626 |
| 1938 | 0.1020 | 0.0662 | 0.0720 | 0.0773 | 0.0825 | 0.0884 | 0.1505 |
| 1939 | 0.1538 | 0.0692 | 0.0435 | 0.0473 | 0.0510 | 0.0851 | 0.0923 |
| 1940 | -0.1643 | 0.0910 | 0.0480 | 0.0506 | 0.0532 | 0.0949 | 0.1359 |
| 1941 | -0.3050 | 0.0234 | 0.0255 | 0.0291 | 0.0327 | 0.0428 | 0.0681 |
| 1942 | 0.1079 | -0.0735 | 0.0261 | 0.0287 | 0.0313 | 0.0314 | 0.0590 |
| 1943 | 0.4750 | 0.0228 | 0.0312 | 0.0346 | 0.0380 | 0.0405 | 0.0564 |
| 1944 | 0.1879 | 0.0268 | 0.0343 | 0.0353 | 0.0362 | 0.0303 | 0.0459 |
| 1945 | 0.5665 | 0.1075 | 0.0298 | 0.0349 | 0.0383 | 0.0683 | 0.0805 |
| 1946 | -0.0130 | -0.0006 | 0.0233 | 0.0238 | 0.0242 | 0.0267 | 0.0377 |
| 1947 | -0.1236 | -0.0165 | -0.0139 | -0.0187 | -0.0234 | -0.0213 | -0.0105 |
| 1948 | 0.0451 | 0.0202 | 0.0287 | 0.0317 | 0.0347 | 0.0225 | 0.0073 |
| 1949 | 0.3074 | 0.0760 | 0.0718 | 0.0746 | 0.0773 | 0.0892 | 0.0757 |
| 1950 | 0.0152 | -0.0034 | 0.0126 | 0.0131 | 0.0135 | 0.0107 | 0.0233 |
| 1951 | 0.2075 | -0.0541 | -0.0393 | -0.0393 | -0.0393 | -0.0468 | -0.0268 |
| 1952 | 0.1947 | 0.0101 | 0.0373 | 0.0390 | 0.0407 | 0.0442 | 0.0399 |
| 1953 | 0.0918 | 0.0062 | 0.0078 | 0.0063 | 0.0048 | 0.0107 | 0.0037 |
| 1954 | 0.2269 | 0.0676 | 0.0668 | 0.0701 | 0.0733 | 0.0745 | 0.0909 |
| 1955 | 0.1357 | -0.0264 | -0.0107 | -0.0127 | -0.0147 | -0.0100 | 0.0146 |
| 1956 | 0.0416 | -0.0484 | -0.0703 | -0.0703 | -0.0703 | -0.0714 | -0.0816 |
| 1957 | 0.0541 | 0.0472 | 0.0246 | 0.0229 | 0.0213 | 0.0054 | -0.0131 |
| 1958 | 0.3827 | -0.0439 | -0.0081 | -0.0032 | 0.0017 | 0.0123 | 0.0339 |
| 1959 | 0.0958 | -0.0320 | -0.0231 | -0.0234 | -0.0237 | -0.0120 | -0.0102 |
| 1960 | 0.1680 | 0.1106 | 0.0764 | 0.0735 | 0.0705 | 0.0791 | 0.0994 |
| 1961 | 0.3646 | 0.0135 | 0.0432 | 0.0448 | 0.0464 | 0.0502 | 0.0442 |
| 1962 | -0.0519 | 0.0650 | 0.0831 | 0.0829 | 0.0828 | 0.0852 | 0.0891 |
| 1963 | 0.1261 | -0.0022 | 0.0171 | 0.0202 | 0.0232 | 0.0294 | 0.0329 |
| 1964 | 0.1685 | 0.0439 | 0.0394 | 0.0391 | 0.0387 | 0.0409 | 0.0396 |
| 1965 | 0.0489 | -0.0064 | -0.0010 | -0.0014 | -0.0018 | -0.0044 | 0.0050 |
| 1966 | -0.0504 | 0.0085 | -0.0501 | -0.0509 | -0.0518 | -0.0602 | -0.0990 |
| 1967 | -0.0216 | -0.0650 | -0.0525 | -0.0539 | -0.0553 | -0.0592 | -0.0271 |
| 1968 | 0.1419 | 0.0149 | 0.0268 | 0.0224 | 0.0181 | 0.0286 | 0.0243 |
| 1969 | -0.1769 | -0.0640 | -0.0792 | -0.0839 | -0.0885 | -0.0960 | -0.0892 |
| 1970 | 0.1494 | 0.1537 | 0.0970 | 0.0978 | 0.0987 | 0.0952 | 0.0761 |
| 1971 | 0.0050 | 0.0999 | 0.1168 | 0.1241 | 0.1313 | 0.1510 | 0.1681 |
| 1972 | 0.1464 | 0.0661 | 0.0912 | 0.0980 | 0.1047 | 0.1103 | 0.1387 |
| 1973 | -0.2106 | -0.0893 | 0.0158 | 0.0138 | 0.0118 | 0.0156 | 0.0150 |
| 1974 | -0.2135 | 0.0092 | -0.0315 | -0.0360 | -0.0405 | -0.0683 | -0.1033 |

Annual Total Returns of
S&P Public Utility Stocks and Bonds
for the Years 1928-2022

| Years | Annual Total Returns | | | | | | |
|-------|--------------------------|-------------------|----------------------|-------------|---------|---------|---------|
| | Public Utility Stocks | L-Term T-Bonds | Public Utility Bonds | | | | BBB |
| | | | AAA | AAA & AA | AA | A | |
| 1975 | 0.4364 | 0.0465 | 0.0915 | 0.0863 | 0.0813 | 0.0872 | 0.0940 |
| 1976 | 0.3245 | 0.1955 | 0.1976 | 0.2017 | 0.2058 | 0.2475 | 0.2806 |
| 1977 | 0.1076 | 0.0074 | 0.0459 | 0.0545 | 0.0629 | 0.0683 | 0.0903 |
| 1978 | -0.0174 | -0.0189 | -0.0083 | -0.0055 | -0.0027 | -0.0026 | 0.0000 |
| 1979 | 0.1221 | -0.0289 | -0.0424 | -0.0509 | -0.0590 | -0.0655 | -0.0823 |
| 1980 | 0.1275 | -0.0804 | -0.0782 | -0.0778 | -0.0773 | -0.0702 | -0.0649 |
| 1981 | 0.1464 | 0.0472 | 0.0616 | 0.0674 | 0.0730 | 0.0416 | 0.0674 |
| 1982 | 0.2292 | 0.4323 | 0.3294 | 0.3750 | 0.3942 | 0.3708 | 0.3808 |
| 1983 | 0.2372 | -0.0049 | 0.0721 | 0.0691 | 0.0763 | 0.1406 | 0.1347 |
| 1984 | 0.2219 | 0.1611 | 0.1770 | 0.1796 | 0.1768 | 0.1783 | 0.2075 |
| 1985 | 0.3232 | 0.3143 | 0.3473 | 0.3276 | 0.3259 | 0.3143 | 0.3098 |
| 1986 | 0.3575 | 0.3692 | 0.2994 | 0.2720 | 0.2698 | 0.2835 | 0.2933 |
| 1987 | -0.0544 | -0.1013 | -0.1132 | -0.0637 | -0.0566 | -0.0435 | -0.0505 |
| 1988 | 0.1849 | 0.1026 | 0.2027 | 0.1615 | 0.1594 | 0.1643 | 0.1919 |
| 1989 | 0.4351 | 0.2176 | 0.1770 | 0.1743 | 0.1715 | 0.1692 | 0.1781 |
| 1990 | 0.0069 | 0.0482 | 0.0685 | 0.0689 | 0.0722 | 0.0738 | 0.0728 |
| 1991 | 0.0931 | 0.1472 | 0.1813 | 0.1647 | 0.1624 | 0.1715 | 0.1878 |
| 1992 | 0.1183 | 0.1093 | 0.1264 | 0.1312 | 0.1324 | 0.1355 | 0.1315 |
| 1993 | 0.1661 | 0.2162 | 0.1926 | 0.2126 | 0.2190 | 0.1429 | 0.1590 |
| 1994 | -0.0825 | -0.1075 | -0.0802 | -0.0656 | -0.0657 | 0.0065 | -0.0351 |
| 1995 | 0.3772 | 0.3268 | 0.2860 | 0.3074 | 0.3089 | 0.2164 | 0.2442 |
| 1996 | 0.0550 | 0.0020 | 0.0279 | 0.0211 | 0.0214 | 0.0279 | 0.0415 |
| 1997 | 0.1959 | 0.1454 | 0.1181 | 0.1157 | 0.1169 | 0.1238 | 0.1496 |
| 1998 | 0.1896 | 0.1786 | 0.1431 | 0.0365 | 0.0289 | 0.1074 | 0.0981 |
| 1999 | -0.0998 | -0.1062 | -0.0792 | -0.0275 | -0.0237 | -0.0921 | -0.0684 |
| 2000 | 0.5475 | 0.1922 | 0.1076 | 0.1150 | 0.1146 | 0.1101 | 0.1196 |
| 2001 | -0.2877 | 0.0596 | 0.0734 | 0.0788 | 0.0873 | 0.0780 | 0.0534 |
| 2002 | -0.2934 | 0.1362 | | 0.1851 | 0.1851 | 0.2461 | 0.1746 |
| 2003 | 0.2509 | 0.0488 | | 0.1678 | 0.1678 | 0.1529 | 0.2329 |
| 2004 | 0.2763 | 0.0861 | | 0.1162 | 0.1162 | 0.0782 | 0.0919 |
| 2005 | 0.2151 | 0.0520 | | 0.0869 | 0.0869 | 0.0732 | 0.0541 |
| 2006 | 0.2323 | 0.0421 | | 0.0486 | 0.0486 | 0.0596 | 0.0759 |
| 2007 | 0.1434 | 0.0814 | | 0.0043 | 0.0043 | 0.0143 | 0.0042 |
| 2008 | -0.3160 | 0.2953 | | 0.0733 | 0.0733 | 0.0132 | -0.1109 |
| 2009 | 0.1801 | -0.1460 | | 0.1159 | 0.1159 | 0.1662 | 0.3279 |
| 2010 | 0.0795 | 0.0755 | | 0.0809 | 0.0809 | 0.0871 | 0.0893 |
| 2011 | 0.2051 | 0.3271 | | 0.2701 | 0.2701 | 0.2505 | 0.2019 |
| 2012 | 0.1272 | 0.0622 | | 0.0801 | 0.0801 | 0.0955 | 0.1287 |
| 2013 | 0.1363 | -0.1592 | | -0.0850 | -0.0850 | -0.0758 | -0.0494 |
| 2014 | 0.3017 | 0.2419 | | 0.1577 | 0.1577 | 0.1872 | 0.1333 |
| 2015 | -0.0629 | 0.0115 | | -0.0031 | -0.0031 | -0.0227 | -0.0682 |
| 2016 | 0.1834 | -0.0224 | | 0.0443 | 0.0443 | 0.0512 | 0.1625 |
| 2017 | 0.1966 | 0.0714 | | 0.1224 | 0.1224 | 0.1211 | 0.1505 |
| 2018 | 0.0644 | -0.0579 | | -0.0566 | -0.0566 | -0.0477 | -0.0680 |
| 2019 | 0.2690 | 0.2127 | | 0.2209 | 0.2209 | 0.2098 | 0.2471 |
| 2020 | 0.0301 | 0.1584 | | 0.1505 | 0.1505 | 0.1465 | 0.1557 |
| 2021 | 0.1510 | -0.0679 | | -0.0499 | -0.0499 | -0.0335 | -0.0210 |
| 2022 | 0.0763 | -0.2760 | | -0.2457 | -0.2457 | -0.2515 | -0.2493 |

Annual Total Returns of S&P Public Utility Stocks
And Annual Income Returns of Bonds
for the Years 1928-2022

| Years | Annual Total Returns | | Income Returns | | | | |
|-------|--------------------------|-------------------|----------------------|-------------|--------|--------|--------|
| | Public Utility Stocks | L-Term T-Bonds | Public Utility Bonds | | | | |
| | | | AAA | AAA & AA | AA | A | BBB |
| 1928 | 0.5431 | 0.0329 | 0.0451 | 0.0460 | 0.0470 | 0.0499 | 0.0541 |
| 1929 | 0.1376 | 0.0361 | 0.0468 | 0.0479 | 0.0490 | 0.0522 | 0.0578 |
| 1930 | -0.2149 | 0.0332 | 0.0458 | 0.0470 | 0.0482 | 0.0514 | 0.0591 |
| 1931 | -0.3193 | 0.0338 | 0.0434 | 0.0449 | 0.0463 | 0.0511 | 0.0635 |
| 1932 | -0.0724 | 0.0350 | 0.0474 | 0.0504 | 0.0535 | 0.0640 | 0.0815 |
| 1933 | -0.2170 | 0.0315 | 0.0436 | 0.0468 | 0.0499 | 0.0604 | 0.0833 |
| 1934 | -0.1743 | 0.0306 | 0.0402 | 0.0436 | 0.0471 | 0.0559 | 0.0713 |
| 1935 | 0.6914 | 0.0278 | 0.0351 | 0.0376 | 0.0402 | 0.0466 | 0.0544 |
| 1936 | 0.2357 | 0.0273 | 0.0324 | 0.0343 | 0.0362 | 0.0415 | 0.0465 |
| 1937 | -0.3337 | 0.0275 | 0.0320 | 0.0334 | 0.0347 | 0.0395 | 0.0486 |
| 1938 | 0.1020 | 0.0263 | 0.0303 | 0.0316 | 0.0329 | 0.0392 | 0.0510 |
| 1939 | 0.1538 | 0.0239 | 0.0286 | 0.0296 | 0.0305 | 0.0360 | 0.0448 |
| 1940 | -0.1643 | 0.0224 | 0.0277 | 0.0285 | 0.0293 | 0.0331 | 0.0410 |
| 1941 | -0.3050 | 0.0197 | 0.0269 | 0.0276 | 0.0283 | 0.0304 | 0.0366 |
| 1942 | 0.1079 | 0.0239 | 0.0272 | 0.0279 | 0.0287 | 0.0305 | 0.0358 |
| 1943 | 0.4750 | 0.0246 | 0.0264 | 0.0269 | 0.0273 | 0.0296 | 0.0338 |
| 1944 | 0.1879 | 0.0248 | 0.0265 | 0.0268 | 0.0272 | 0.0294 | 0.0333 |
| 1945 | 0.5665 | 0.0229 | 0.0256 | 0.0261 | 0.0266 | 0.0285 | 0.0318 |
| 1946 | -0.0130 | 0.0208 | 0.0250 | 0.0254 | 0.0257 | 0.0268 | 0.0293 |
| 1947 | -0.1236 | 0.0215 | 0.0257 | 0.0261 | 0.0264 | 0.0273 | 0.0297 |
| 1948 | 0.0451 | 0.0240 | 0.0282 | 0.0287 | 0.0292 | 0.0301 | 0.0327 |
| 1949 | 0.3074 | 0.0223 | 0.0270 | 0.0274 | 0.0277 | 0.0291 | 0.0324 |
| 1950 | 0.0152 | 0.0216 | 0.0262 | 0.0264 | 0.0267 | 0.0276 | 0.0312 |
| 1951 | 0.2075 | 0.0244 | 0.0285 | 0.0288 | 0.0291 | 0.0307 | 0.0334 |
| 1952 | 0.1947 | 0.0265 | 0.0300 | 0.0303 | 0.0305 | 0.0324 | 0.0351 |
| 1953 | 0.0918 | 0.0300 | 0.0325 | 0.0328 | 0.0331 | 0.0347 | 0.0371 |
| 1954 | 0.2269 | 0.0266 | 0.0296 | 0.0298 | 0.0301 | 0.0317 | 0.0348 |
| 1955 | 0.1357 | 0.0287 | 0.0307 | 0.0309 | 0.0311 | 0.0324 | 0.0341 |
| 1956 | 0.0416 | 0.0310 | 0.0335 | 0.0337 | 0.0340 | 0.0357 | 0.0374 |
| 1957 | 0.0541 | 0.0355 | 0.0397 | 0.0400 | 0.0403 | 0.0428 | 0.0452 |
| 1958 | 0.3827 | 0.0344 | 0.0384 | 0.0386 | 0.0389 | 0.0414 | 0.0447 |
| 1959 | 0.0958 | 0.0409 | 0.0445 | 0.0448 | 0.0451 | 0.0470 | 0.0494 |
| 1960 | 0.1680 | 0.0409 | 0.0450 | 0.0453 | 0.0455 | 0.0473 | 0.0489 |
| 1961 | 0.3646 | 0.0391 | 0.0442 | 0.0445 | 0.0449 | 0.0462 | 0.0476 |
| 1962 | -0.0519 | 0.0401 | 0.0434 | 0.0437 | 0.0439 | 0.0450 | 0.0466 |
| 1963 | 0.1261 | 0.0403 | 0.0427 | 0.0429 | 0.0431 | 0.0437 | 0.0456 |
| 1964 | 0.1685 | 0.0419 | 0.0441 | 0.0442 | 0.0443 | 0.0450 | 0.0466 |
| 1965 | 0.0489 | 0.0424 | 0.0448 | 0.0450 | 0.0451 | 0.0458 | 0.0475 |
| 1966 | -0.0504 | 0.0475 | 0.0513 | 0.0515 | 0.0518 | 0.0531 | 0.0552 |
| 1967 | -0.0216 | 0.0494 | 0.0553 | 0.0556 | 0.0559 | 0.0576 | 0.0605 |
| 1968 | 0.1419 | 0.0543 | 0.0621 | 0.0627 | 0.0633 | 0.0651 | 0.0684 |
| 1969 | -0.1769 | 0.0624 | 0.0706 | 0.0716 | 0.0725 | 0.0743 | 0.0778 |
| 1970 | 0.1494 | 0.0692 | 0.0822 | 0.0833 | 0.0844 | 0.0870 | 0.0913 |
| 1971 | 0.0050 | 0.0614 | 0.0766 | 0.0777 | 0.0789 | 0.0825 | 0.0868 |
| 1972 | 0.1464 | 0.0601 | 0.0744 | 0.0751 | 0.0758 | 0.0778 | 0.0815 |
| 1973 | -0.2106 | 0.0701 | 0.0762 | 0.0767 | 0.0773 | 0.0789 | 0.0812 |
| 1974 | -0.2135 | 0.0800 | 0.0849 | 0.0861 | 0.0873 | 0.0899 | 0.0929 |

Annual Total Returns of S&P Public Utility Stocks
And Annual Income Returns of Bonds
for the Years 1928-2022

| Years | Annual Total Returns | | Income Returns | | | | |
|-------|--------------------------|-------------------|----------------------|-------------|--------|--------|--------|
| | Public Utility Stocks | L-Term T-Bonds | Public Utility Bonds | | | | |
| | | | AAA | AAA & AA | AA | A | BBB |
| 1975 | 0.4364 | 0.0817 | 0.0894 | 0.0912 | 0.0929 | 0.0978 | 0.1057 |
| 1976 | 0.3245 | 0.0794 | 0.0864 | 0.0880 | 0.0895 | 0.0928 | 0.0987 |
| 1977 | 0.1076 | 0.0765 | 0.0814 | 0.0829 | 0.0845 | 0.0859 | 0.0896 |
| 1978 | -0.0174 | 0.0840 | 0.0877 | 0.0888 | 0.0900 | 0.0917 | 0.0947 |
| 1979 | 0.1221 | 0.0921 | 0.0962 | 0.0978 | 0.0995 | 0.1017 | 0.1064 |
| 1980 | 0.1275 | 0.1115 | 0.1182 | 0.1211 | 0.1241 | 0.1271 | 0.1352 |
| 1981 | 0.1464 | 0.1349 | 0.1427 | 0.1458 | 0.1489 | 0.1529 | 0.1616 |
| 1982 | 0.2292 | 0.1309 | 0.1439 | 0.1448 | 0.1464 | 0.1532 | 0.1610 |
| 1983 | 0.2372 | 0.1115 | 0.1247 | 0.1229 | 0.1237 | 0.1298 | 0.1350 |
| 1984 | 0.2219 | 0.1247 | 0.1297 | 0.1339 | 0.1341 | 0.1374 | 0.1434 |
| 1985 | 0.3232 | 0.1104 | 0.1187 | 0.1179 | 0.1189 | 0.1228 | 0.1270 |
| 1986 | 0.3575 | 0.0802 | 0.0908 | 0.0930 | 0.0940 | 0.0973 | 0.1015 |
| 1987 | -0.0544 | 0.0843 | 0.0934 | 0.0946 | 0.0953 | 0.0985 | 0.1027 |
| 1988 | 0.1849 | 0.0897 | 0.1013 | 0.1009 | 0.1014 | 0.1040 | 0.1083 |
| 1989 | 0.4351 | 0.0854 | 0.0938 | 0.0949 | 0.0955 | 0.0980 | 0.1001 |
| 1990 | 0.0069 | 0.0858 | 0.0943 | 0.0959 | 0.0964 | 0.0985 | 0.1009 |
| 1991 | 0.0931 | 0.0818 | 0.0891 | 0.0915 | 0.0921 | 0.0943 | 0.0961 |
| 1992 | 0.1183 | 0.0769 | 0.0822 | 0.0860 | 0.0869 | 0.0887 | 0.0897 |
| 1993 | 0.1661 | 0.0671 | 0.0737 | 0.0776 | 0.0780 | 0.0805 | 0.0816 |
| 1994 | -0.0825 | 0.0730 | 0.0794 | 0.0799 | 0.0802 | 0.0826 | 0.0868 |
| 1995 | 0.3772 | 0.0708 | 0.0781 | 0.0774 | 0.0776 | 0.0813 | 0.0857 |
| 1996 | 0.0550 | 0.0672 | 0.0745 | 0.0742 | 0.0745 | 0.0762 | 0.0805 |
| 1997 | 0.1959 | 0.0670 | 0.0746 | 0.0743 | 0.0746 | 0.0747 | 0.0782 |
| 1998 | 0.1896 | 0.0572 | 0.0682 | 0.0674 | 0.0677 | 0.0687 | 0.0710 |
| 1999 | -0.0998 | 0.0592 | 0.0710 | 0.0740 | 0.0748 | 0.0743 | 0.0766 |
| 2000 | 0.5475 | 0.0607 | 0.0790 | 0.0817 | 0.0821 | 0.0830 | 0.0839 |
| 2001 | -0.2877 | 0.0557 | 0.0747 | 0.0777 | 0.0780 | 0.0787 | 0.0810 |
| 2002 | -0.2934 | 0.0542 | | 0.0730 | 0.0730 | 0.0754 | 0.0818 |
| 2003 | 0.2509 | 0.0496 | | 0.0646 | 0.0646 | 0.0623 | 0.0673 |
| 2004 | 0.2763 | 0.0505 | | 0.0608 | 0.0608 | 0.0617 | 0.0641 |
| 2005 | 0.2151 | 0.0465 | | 0.0546 | 0.0546 | 0.0566 | 0.0592 |
| 2006 | 0.2323 | 0.0499 | | 0.0583 | 0.0583 | 0.0607 | 0.0632 |
| 2007 | 0.1434 | 0.0493 | | 0.0591 | 0.0591 | 0.0605 | 0.0629 |
| 2008 | -0.3160 | 0.0448 | | 0.0619 | 0.0619 | 0.0650 | 0.0711 |
| 2009 | 0.1801 | 0.0401 | | 0.0579 | 0.0579 | 0.0610 | 0.0721 |
| 2010 | 0.0795 | 0.0405 | | 0.0525 | 0.0525 | 0.0548 | 0.0598 |
| 2011 | 0.2051 | 0.0375 | | 0.0489 | 0.0489 | 0.0514 | 0.0565 |
| 2012 | 0.1272 | 0.0256 | | 0.0385 | 0.0385 | 0.0416 | 0.0490 |
| 2013 | 0.1363 | 0.0302 | | 0.0417 | 0.0417 | 0.0441 | 0.0492 |
| 2014 | 0.3017 | 0.0316 | | 0.0424 | 0.0424 | 0.0435 | 0.0485 |
| 2015 | -0.0629 | 0.0254 | | 0.0397 | 0.0397 | 0.0408 | 0.0496 |
| 2016 | 0.1834 | 0.0221 | | 0.0373 | 0.0373 | 0.0394 | 0.0474 |
| 2017 | 0.1966 | 0.0267 | | 0.0386 | 0.0386 | 0.0404 | 0.0443 |
| 2018 | 0.0644 | 0.0307 | | 0.0404 | 0.0404 | 0.0420 | 0.0460 |
| 2019 | 0.2690 | 0.0248 | | 0.0369 | 0.0369 | 0.0385 | 0.0429 |
| 2020 | 0.0301 | 0.0141 | | 0.0285 | 0.0285 | 0.0307 | 0.0345 |
| 2021 | 0.1510 | 0.0194 | | 0.0293 | 0.0293 | 0.0308 | 0.0334 |
| 2022 | 0.0763 | 0.0314 | | 0.0436 | 0.0436 | 0.0454 | 0.0485 |

Development of the Projected Risk Premium

Value Line Summary and Index Project Return

| | |
|--|----------------|
| Date | 11/17/23 |
| Market's Price Appreciation Next 3-5 Years | <u>65</u> % |
| Annual Price Appreciation | 13.30 % |
| Forecasted Market Dividend Yield | <u>2.40</u> |
| Value Line's Annual Total Return | <u>15.70</u> % |

S&P 500 Projected Market Return

| | |
|--|----------------|
| S&P 500's Dividend Yield | 1.52 % |
| S&P 500's Projected Growth Rate in EPS | <u>12.33</u> |
| S&P 500 Projected Market Return | <u>13.94</u> % |

Average Projected Total Market Return 14.82 %

Less Yield of Moody's A Rated Industrial Bonds 5.69

Forecasted Equity Premium 9.13 %

Estimated Risk Adjustment 90%

Forecasted Risk Premium 8.20 %

Veolia Water Pennsylvania, Inc.
Common Equity Cost Rate Summary

| | Water Group Followed by Analysts | | |
|---|----------------------------------|----------------|--------------|
| | <u>DCF(1)</u> | <u>CAPM(2)</u> | <u>RP(3)</u> |
| Common Equity Cost Rate Range | 9.45 % | 11.75 % | 11.35 % |
| Investment Risk Adjustments (4) | <u>0.00</u> | <u>0.00</u> | <u>0.00</u> |
| Veolia Water Pennsylvania, Inc. Adjusted Common Equity Cost Rate Range: | <u>9.45</u> | <u>11.75</u> | <u>11.35</u> |
| Veolia Water Pennsylvania, Inc. Recommended Common Equity Cost Rate (5) | <u><u>10.80 %</u></u> | | |
| Check of Reasonableness of Common Equity Cost Rate (6) | 10.3 % to 10.7 % | | |

Notes: (1) From Schedule 12 and explained in the Direct Testimony.

(2) From Schedule 17 and explained in the Direct Testimony.

(3) From Schedule 18 and explained in the Direct Testimony.

(4) As explained in the Direct Testimony.

(5) As explained in the Direct Testimony, the recommendation is only applicable to a rate making common equity ratio of 54%. (~54.00%)

(6) See page 2 of Schedule 14.

VEOLIA WATER PENNSYLVANIA, INC.
HARRISBURG, PENNSYLVANIA

CASH WORKING CAPITAL
BASED ON A
LEAD-LAG STUDY

EXHIBIT

LEAD-LAG SCHEDULES

SCHEDULE HW-1 THROUGH SCHEDULE HW-28

TO ACCOMPANY THE

DIRECT TESTIMONY

DECEMBER 2023

Prepared by:



VEOLIA WATER PENNSYLVANIA, INC.

CASH WORKING CAPITAL REQUIREMENTS
 BASED ON A LEAD-LAG STUDY
FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

INDEX TO SCHEDULES

| Schedules | Schedule Subject |
|----------------|---|
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| Schedule HW-2 | Calculation of Total Revenue Lag Days |
| Schedule HW-3 | Labor Expense Lead Days |
| Schedule HW-4 | Employee Group Health & Life Lead Days |
| Schedule HW-5 | Employee Pension Benefits Lead Days |
| Schedule HW-6 | Other Employee Benefits Lead Days |
| Schedule HW-7 | Purchased Water Lead Days |
| Schedule HW-8 | Purchased Power Lead Days |
| Schedule HW-9 | Fuel for Power Production Lead Days |
| Schedule HW-10 | Chemicals Lead Days |
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| Schedule HW-21 | Regulatory Commission Expense Lead Days |
| Schedule HW-22 | Office Expense and Utilities Lead Days |
| Schedule HW-23 | Postage and Air Freight Expense Lead Days |
| Schedule HW-24 | Other O&M Lead Days |
| Schedule HW-25 | Real Estate Tax Lead Days |
| Schedule HW-26 | Payroll Tax Lead Days |
| Schedule HW-27 | Federal Income Taxes Lead Days |
| Schedule HW-28 | State Income Taxes Lead Days |

VEOLIA WATER PENNSYLVANIA, INC. - WATER & SEWER OPERATIONS (Main, Bethel & Mahoning)

SUMMARY OF CASH WORKING CAPITAL REQUIREMENTS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| Utility Operating Expenses | Revenue Days | Expense Days | Net Lag Days | Expense Claim 12-Months Ending 9/30/2023 | Expense Claim Future Test Year 9/30/2024 | Future Test Year 9/30/2024 CWC | Expense Claim Fully Projected Year Under Present Rates 10/31/2025 | Fully Projected Year Under Present Rates 10/31/2025 CWC | Expense Claim Fully Projected Year Under Proposed Rates 10/31/2025 | Fully Projected Year Under Proposed Rates 10/31/2025 CWC |
|---------------------------------|--------------|--------------|--------------|--|--|--------------------------------|---|---|--|--|
| Labor Expense | 34.5 | 11.4 | 23.1 | \$ 5,860,476 | \$ 7,273,930 | \$ 460,350 | \$ 7,473,963 | \$ 473,010 | \$ 7,473,963 | \$ 473,010 |
| Employee Group Health & Life | 34.5 | 10.1 | 24.4 | 927,846 | 1,570,924 | 105,015 | 1,605,485 | 107,326 | 1,605,485 | 107,326 |
| Employee Pension Benefits | 34.5 | 29.3 | 5.2 | 369,408 | 621,192 | 8,850 | 634,858 | 9,045 | 634,858 | 9,045 |
| Other Employee Benefits | 34.5 | 276.0 | (241.5) | 370,926 | 433,856 | (287,058) | 446,073 | (295,141) | 446,073 | (295,141) |
| Purchased Water | 34.5 | 26.6 | 7.9 | 1,825,613 | 1,953,061 | 42,272 | 1,996,029 | 43,202 | 1,996,029 | 43,202 |
| Purchased Power | 34.5 | 57.1 | (22.6) | 2,245,114 | 2,588,843 | (160,296) | 2,988,823 | (185,061) | 2,988,823 | (185,061) |
| Fuel for Power Production | 34.5 | 38.8 | (4.3) | 2,000 | 2,048 | (24) | 2,093 | (25) | 2,093 | (25) |
| Chemicals | 34.5 | 27.9 | 6.6 | 987,158 | 1,326,708 | 23,990 | 1,355,895 | 24,518 | 1,355,895 | 24,518 |
| Materials and Supplies | 34.5 | 29.1 | 5.4 | 399,824 | 409,759 | 6,062 | 418,774 | 6,196 | 418,774 | 6,196 |
| Management and Service Fees | 34.5 | 14.7 | 19.8 | 4,076,177 | 4,513,925 | 244,865 | 4,680,176 | 253,883 | 4,680,176 | 253,883 |
| Lab Testing Fees | 34.5 | 26.2 | 8.3 | 371,267 | 317,388 | 7,217 | 324,371 | 7,376 | 324,371 | 7,376 |
| Outside Contractors | 34.5 | 30.9 | 3.6 | 2,587,505 | 2,564,797 | 25,297 | 2,621,222 | 25,853 | 2,621,222 | 25,853 |
| Outside Professional Services | 34.5 | 45.0 | (10.5) | 243,942 | 133,338 | (3,836) | 136,272 | (3,920) | 136,272 | (3,920) |
| Rental - Building/Real Property | 34.5 | (13.2) | 47.7 | - | - | - | - | - | - | - |
| Rental of Equipment | 34.5 | 7.9 | 26.6 | 119,512 | 122,350 | 8,916 | 125,042 | 9,113 | 125,042 | 9,113 |
| Transportation Expense | 34.5 | 38.1 | (3.6) | 564,982 | 646,465 | (6,376) | 754,003 | (7,437) | 754,003 | (7,437) |
| Prop& Gen Lib. Insurance | 34.5 | (130.5) | 165.0 | (374) | (169) | - | - | - | - | - |
| Worker Compensation | 34.5 | (130.5) | 165.0 | 19,183 | 46,818 | 21,164 | 48,207 | 21,792 | 48,207 | 21,792 |
| Regulatory Commission Expense | 34.5 | (101.5) | 136.0 | 355,283 | 344,794 | 128,471 | 370,839 | 138,176 | 469,487 | 174,932 |
| Office Expense and Utilities | 34.5 | 8.9 | 25.6 | 846,564 | 884,514 | 62,037 | 875,473 | 61,403 | 875,473 | 61,403 |
| Postage and Air Freight Expense | 34.5 | 40.3 | (5.8) | 422,855 | 408,953 | (6,498) | 421,346 | (6,695) | 421,346 | (6,695) |
| Other O&M | 34.5 | 30.3 | 4.2 | 146,049 | 161,503 | 1,858 | 165,056 | 1,899 | 165,056 | 1,899 |
| Real Estate Tax | 34.5 | (26.9) | 61.4 | 447,173 | 342,489 | 57,613 | 350,024 | 58,881 | 350,024 | 58,881 |
| Payroll | 34.5 | 18.5 | 16.0 | 705,028 | 896,038 | 39,278 | 918,735 | 40,273 | 918,735 | 40,273 |
| Federal Income Taxes | 34.5 | 37.0 | (2.5) | 2,286,735 | 1,494,710 | (10,238) | 1,383,237 | (9,474) | 4,447,663 | (30,463) |
| State Income Taxes | 34.5 | 28.8 | 5.8 | 632,282 | 649,164 | 10,227 | 558,854 | 8,804 | 1,845,958 | 29,080 |
| Total | | | | \$ 663,853 | \$ 779,156 | \$ 779,156 | \$ 819,040 | \$ 819,040 | \$ 819,040 | \$ 819,040 |

VEOLIA WATER PENNSYLVANIA, INC. - MAIN & BETHEL WATER OPERATIONS

SUMMARY OF CASH WORKING CAPITAL REQUIREMENTS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| Utility Operating Expenses | Revenue Days | Expense Days | Net Lag Days | Expense Claim 12-Months Ending 9/30/2023 | Expense Claim Future Test Year 9/30/2024 | Future Test Year 9/30/2024 CWC | Expense Claim Fully Projected Year Under Present Rates 10/31/2025 | Fully Projected Year Under Present Rates 10/31/2025 CWC | Expense Claim Fully Projected Year Under Proposed Rates 10/31/2025 | Fully Projected Year Under Proposed Rates 10/31/2025 CWC |
|---------------------------------|--------------|--------------|--------------|--|--|--------------------------------|---|---|--|--|
| Labor Expense | 34.5 | 11.4 | 23.1 | \$ 5,808,021 | \$ 7,219,980 | \$ 456,936 | \$ 7,418,529 | \$ 469,501 | \$ 7,418,529 | \$ 469,501 |
| Employee Group Health & Life | 34.5 | 10.1 | 24.4 | 920,056 | 1,562,536 | 104,454 | 1,596,912 | 106,752 | 1,596,912 | 106,752 |
| Employee Pension Benefits | 34.5 | 29.3 | 5.2 | 367,110 | 618,677 | 8,814 | 632,288 | 9,008 | 632,288 | 9,008 |
| Other Employee Benefits | 34.5 | 276.0 | (241.5) | 369,900 | 432,701 | (286,294) | 444,895 | (294,362) | 444,895 | (294,362) |
| Purchased Water | 34.5 | 26.6 | 7.9 | 1,674,806 | 1,798,673 | 38,930 | 1,838,244 | 39,787 | 1,838,244 | 39,787 |
| Purchased Power | 34.5 | 57.1 | (22.6) | 2,168,330 | 2,500,304 | (154,813) | 2,886,605 | (178,732) | 2,886,605 | (178,732) |
| Fuel for Power Production | 34.5 | 38.8 | (4.3) | 2,000 | 2,048 | (24) | 2,093 | (25) | 2,093 | (25) |
| Chemicals | 34.5 | 27.9 | 6.6 | 978,820 | 1,315,615 | 23,789 | 1,344,558 | 24,313 | 1,344,558 | 24,313 |
| Materials and Supplies | 34.5 | 29.1 | 5.4 | 390,107 | 398,664 | 5,898 | 407,435 | 6,028 | 407,435 | 6,028 |
| Management and Service Fees | 34.5 | 14.7 | 19.8 | 4,016,221 | 4,447,530 | 241,263 | 4,611,336 | 250,149 | 4,611,336 | 250,149 |
| Lab Testing Fees | 34.5 | 26.2 | 8.3 | 247,303 | 207,763 | 4,724 | 212,334 | 4,828 | 212,334 | 4,828 |
| Outside Contractors | 34.5 | 30.9 | 3.6 | 1,723,551 | 1,674,549 | 16,516 | 1,711,389 | 16,879 | 1,711,389 | 16,879 |
| Outside Professional Services | 34.5 | 45.0 | (10.5) | 162,491 | 86,676 | (2,493) | 88,583 | (2,548) | 88,583 | (2,548) |
| Rental - Building/Real Property | 34.5 | (13.2) | 47.7 | - | - | - | - | - | - | - |
| Rental of Equipment | 34.5 | 7.9 | 26.6 | 119,376 | 122,211 | 8,906 | 124,900 | 9,102 | 124,900 | 9,102 |
| Transportation Expense | 34.5 | 38.1 | (3.6) | 559,556 | 640,920 | (6,321) | 748,343 | (7,381) | 748,343 | (7,381) |
| Prop& Gen Lib. Insurance | 34.5 | (130.5) | 165.0 | (307) | - | - | - | - | - | - |
| Worker Compensation | 34.5 | (130.5) | 165.0 | 19,062 | 46,710 | 21,115 | 48,098 | 21,743 | 48,098 | 21,743 |
| Regulatory Commission Expense | 34.5 | (101.5) | 136.0 | 339,644 | 329,377 | 122,727 | 355,109 | 132,315 | 448,734 | 167,200 |
| Office Expense and Utilities | 34.5 | 8.9 | 25.6 | 833,156 | 870,001 | 61,019 | 861,668 | 60,435 | 861,668 | 60,435 |
| Postage and Air Freight Expense | 34.5 | 40.3 | (5.8) | 385,250 | 372,584 | (5,921) | 383,875 | (6,100) | 383,875 | (6,100) |
| Other O&M | 34.5 | 30.3 | 4.2 | 145,258 | 160,628 | 1,848 | 164,161 | 1,889 | 164,161 | 1,889 |
| Real Estate Tax | 34.5 | (26.9) | 61.4 | 440,481 | 335,638 | 56,461 | 343,022 | 57,703 | 343,022 | 57,703 |
| Payroll | 34.5 | 18.5 | 16.0 | 704,519 | 895,525 | 39,256 | 918,219 | 40,251 | 918,219 | 40,251 |
| Federal Income Taxes | 34.5 | 37.0 | (2.5) | 2,252,155 | 1,548,222 | (10,604) | 1,525,244 | (10,447) | 4,316,438 | (29,565) |
| State Income Taxes | 34.5 | 28.8 | 5.8 | 622,646 | 674,206 | 10,621 | 619,541 | 9,760 | 1,791,883 | 28,228 |
| Total | | | | \$ 642,379 | \$ 756,807 | \$ 756,807 | \$ 760,848 | \$ 760,848 | \$ 795,083 | \$ 795,083 |

VEOLIA WATER PENNSYLVANIA, INC. - MAIN SEWER OPERATIONS

SUMMARY OF CASH WORKING CAPITAL REQUIREMENTS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| Utility Operating Expenses | Revenue Days | Expense Days | Net Lag Days | Expense Claim 12-Months Ending 9/30/2023 | Expense Claim Future Test Year 9/30/2024 | Future Test Year 9/30/2024 CWC | Expense Claim Fully Projected Year Under Present Rates 10/31/2025 | Fully Projected Year Under Present Rates 10/31/2025 CWC | Expense Claim Fully Projected Year Under Proposed Rates 10/31/2025 | Fully Projected Year Under Proposed Rates 10/31/2025 CWC |
|---------------------------------|--------------|--------------|--------------|--|--|--------------------------------|---|---|--|--|
| Labor Expense | 34.5 | 11.4 | 23.1 | \$ 44,741 | \$ 46,017 | \$ 2,912 | \$ 47,282 | \$ 2,992 | \$ 47,282 | \$ 2,992 |
| Employee Group Health & Life | 34.5 | 10.1 | 24.4 | 6,609 | 6,766 | 452 | 6,915 | 462 | 6,915 | 462 |
| Employee Pension Benefits | 34.5 | 29.3 | 5.2 | 1,892 | 1,937 | 28 | 1,979 | 28 | 1,979 | 28 |
| Other Employee Benefits | 34.5 | 276.0 | (241.5) | 718 | 802 | (531) | 823 | (544) | 823 | (544) |
| Purchased Water | 34.5 | 26.6 | 7.9 | - | - | - | - | - | - | - |
| Purchased Power | 34.5 | 57.1 | (22.6) | - | - | - | - | - | - | - |
| Fuel for Power Production | 34.5 | 38.8 | (4.3) | - | - | - | - | - | - | - |
| Chemicals | 34.5 | 27.9 | 6.6 | 929 | 1,134 | 21 | 1,159 | 21 | 1,159 | 21 |
| Materials and Supplies | 34.5 | 29.1 | 5.4 | 107 | 142 | 2 | 145 | 2 | 145 | 2 |
| Management and Service Fees | 34.5 | 14.7 | 19.8 | - | - | - | - | - | - | - |
| Lab Testing Fees | 34.5 | 26.2 | 8.3 | 4,060 | 3,590 | 82 | 3,669 | 83 | 3,669 | 83 |
| Outside Contractors | 34.5 | 30.9 | 3.6 | 28,292 | 29,154 | 288 | 29,795 | 294 | 29,795 | 294 |
| Outside Professional Services | 34.5 | 45.0 | (10.5) | 2,667 | 1,528 | (44) | 1,562 | (45) | 1,562 | (45) |
| Rental - Building/Real Property | 34.5 | (13.2) | 47.7 | - | - | - | - | - | - | - |
| Rental of Equipment | 34.5 | 7.9 | 26.6 | - | - | - | - | - | - | - |
| Transportation Expense | 34.5 | 38.1 | (3.6) | 4,653 | 4,763 | (47) | 4,868 | (48) | 4,868 | (48) |
| Prop& Gen Liab. Insurance | 34.5 | (130.5) | 165.0 | (2) | - | - | - | - | - | - |
| Worker Compensation | 34.5 | (130.5) | 165.0 | 100 | 95 | 43 | 96 | 43 | 96 | 43 |
| Regulatory Commission Expense | 34.5 | (101.5) | 136.0 | 298 | 296 | 110 | 294 | 109 | 396 | 148 |
| Office Expense and Utilities | 34.5 | 8.9 | 25.6 | 30 | 1,034 | 73 | 30 | 2 | 30 | 2 |
| Postage and Air Freight Expense | 34.5 | 40.3 | (5.8) | - | - | - | - | - | - | - |
| Other O&M | 34.5 | 30.3 | 4.2 | - | - | - | - | - | - | - |
| Real Estate Tax | 34.5 | (26.9) | 61.4 | - | - | - | - | - | - | - |
| Payroll | 34.5 | 18.5 | 16.0 | 38 | 41 | 2 | 44 | 2 | 44 | 2 |
| Federal Income Taxes | 34.5 | 37.0 | (2.5) | - | (18,545) | 127 | (23,919) | 164 | (2,792) | 19 |
| State Income Taxes | 34.5 | 28.8 | 5.8 | - | (8,405) | (132) | (10,225) | (161) | (1,352) | (21) |
| Total | | | | \$ 3,252 | \$ 3,386 | \$ 3,386 | \$ 3,404 | \$ 3,404 | \$ 3,438 | \$ 3,438 |

VEOLIA WATER PENNSYLVANIA, INC. - MAHONING WATER OPERATIONS

SUMMARY OF CASH WORKING CAPITAL REQUIREMENTS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| Utility Operating Expenses | Revenue Days | Expense Days | Net Lag Days | Expense Claim 12-Months Ending 9/30/2023 | 12-Months Ending 9/30/2023 CWC | Expense Claim Future Test Year 9/30/2024 | Future Test Year 9/30/2024 CWC | Expense Claim Fully Projected Year Under Present Rates 10/31/2025 | Fully Projected Year Under Present Rates 10/31/2025 CWC | Expense Claim Fully Projected Year Under Proposed Rates 10/31/2025 | Fully Projected Year Under Proposed Rates 10/31/2025 CWC |
|---------------------------------|--------------|--------------|--------------|--|--------------------------------|--|--------------------------------|---|---|--|--|
| Labor Expense | 34.5 | 11.4 | 23.1 | \$ 3,857 | \$ 244 | \$ 3,967 | \$ 251 | \$ 4,076 | \$ 258 | \$ 4,076 | \$ 258 |
| Employee Group Health & Life | 34.5 | 10.1 | 24.4 | 611 | 41 | 1,038 | 69 | 1,061 | 71 | 1,061 | 71 |
| Employee Pension Benefits | 34.5 | 29.3 | 5.2 | 244 | 3 | 411 | 6 | 420 | 6 | 420 | 6 |
| Other Employee Benefits | 34.5 | 276.0 | (241.5) | 246 | (163) | 288 | (190) | 288 | (190) | 288 | (190) |
| Purchased Water | 34.5 | 26.6 | 7.9 | 150,807 | 3,264 | 154,389 | 3,342 | 157,785 | 3,415 | 157,785 | 3,415 |
| Purchased Power | 34.5 | 57.1 | (22.6) | 76,783 | (4,754) | 88,539 | (5,482) | 102,218 | (6,329) | 102,218 | (6,329) |
| Fuel for Power Production | 34.5 | 38.8 | (4.3) | - | - | - | - | - | - | - | - |
| Chemicals | 34.5 | 27.9 | 6.6 | 7,409 | 134 | 9,959 | 180 | 10,178 | 184 | 10,178 | 184 |
| Materials and Supplies | 34.5 | 29.1 | 5.4 | 5,916 | 88 | 6,046 | 89 | 6,179 | 91 | 6,179 | 91 |
| Management and Service Fees | 34.5 | 14.7 | 19.8 | 59,956 | 3,252 | 66,395 | 3,602 | 68,840 | 3,734 | 68,840 | 3,734 |
| Lab Testing Fees | 34.5 | 26.2 | 8.3 | - | - | - | - | - | - | - | - |
| Outside Contractors | 34.5 | 30.9 | 3.6 | - | - | - | - | - | - | - | - |
| Outside Professional Services | 34.5 | 45.0 | (10.5) | - | - | - | - | - | - | - | - |
| Rental - Building/Real Property | 34.5 | (13.2) | 47.7 | - | - | - | - | - | - | - | - |
| Rental of Equipment | 34.5 | 7.9 | 26.6 | 136 | 10 | 139 | 10 | 142 | 10 | 142 | 10 |
| Transportation Expense | 34.5 | 38.1 | (3.6) | 372 | (4) | 372 | (4) | 372 | (4) | 372 | (4) |
| Prop& Gen Lib. Insurance | 34.5 | (130.5) | 165.0 | (5) | (2) | - | - | - | - | - | - |
| Worker Compensation | 34.5 | (130.5) | 165.0 | 13 | 6 | 13 | 6 | 13 | 6 | 13 | 6 |
| Regulatory Commission Expense | 34.5 | (101.5) | 136.0 | 5,053 | 1,883 | 4,900 | 1,826 | 5,283 | 1,968 | 6,676 | 2,487 |
| Office Expense and Utilities | 34.5 | 8.9 | 25.6 | 12,326 | 865 | 12,474 | 875 | 12,748 | 894 | 12,748 | 894 |
| Postage and Air Freight Expense | 34.5 | 40.3 | (5.8) | 37,605 | (598) | 36,369 | (578) | 37,471 | (595) | 37,471 | (595) |
| Other O&M | 34.5 | 30.3 | 4.2 | 791 | 9 | 875 | 10 | 894 | 10 | 894 | 10 |
| Real Estate Tax | 34.5 | (26.9) | 61.4 | 6,692 | 1,126 | 6,851 | 1,152 | 7,001 | 1,178 | 7,001 | 1,178 |
| Payroll | 34.5 | 18.5 | 16.0 | 468 | 21 | 468 | 21 | 468 | 21 | 468 | 21 |
| Federal Income Taxes | 34.5 | 37.0 | (2.5) | 34,579 | (237) | (49,656) | 340 | (87,671) | 600 | 76,535 | (524) |
| State Income Taxes | 34.5 | 28.8 | 5.8 | 9,635 | 152 | (22,736) | (358) | (37,230) | (587) | 31,739 | 500 |
| Total | | | | \$ 5,340 | | \$ 5,167 | | \$ 4,741 | | \$ 5,223 | |

VEOLIA WATER PENNSYLVANIA, INC. - MAHONING SEWER OPERATIONS

SUMMARY OF CASH WORKING CAPITAL REQUIREMENTS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| Utility Operating Expenses | Revenue Days | Expense Days | Net Lag Days | Expense Claim 12-Months Ending 9/30/2023 | 12-Months Ending 9/30/2023 CWC | Expense Claim Future Test Year 9/30/2024 | Future Test Year 9/30/2024 CWC | Expense Claim Fully Projected Year Under Present Rates 10/31/2025 | Fully Projected Year Under Present Rates 10/31/2025 CWC | Expense Claim Fully Projected Year Under Proposed Rates 10/31/2025 | Fully Projected Year Under Proposed Rates 10/31/2025 CWC |
|---------------------------------|--------------|--------------|--------------|--|--------------------------------|--|--------------------------------|---|---|--|--|
| Labor Expense | 34.5 | 11.4 | 23.1 | \$ 3,957 | 244 | \$ 3,967 | 251 | \$ 4,076 | 258 | \$ 4,076 | 258 |
| Employee Group Health & Life | 34.5 | 10.1 | 24.4 | 570 | 38 | 583 | 39 | 596 | 40 | 596 | 40 |
| Employee Pension Benefits | 34.5 | 29.3 | 5.2 | 163 | 2 | 167 | 2 | 171 | 2 | 171 | 2 |
| Other Employee Benefits | 34.5 | 276.0 | (241.5) | 62 | (41) | 65 | (43) | 67 | (44) | 67 | (44) |
| Purchased Water | 34.5 | 26.6 | 7.9 | - | - | - | - | - | - | - | - |
| Purchased Power | 34.5 | 57.1 | (22.6) | - | - | - | - | - | - | - | - |
| Fuel for Power Production | 34.5 | 38.8 | (4.3) | - | - | - | - | - | - | - | - |
| Chemicals | 34.5 | 27.9 | 6.6 | - | - | - | - | - | - | - | - |
| Materials and Supplies | 34.5 | 29.1 | 5.4 | 3,694 | 55 | 4,907 | 73 | 5,015 | 74 | 5,015 | 74 |
| Management and Service Fees | 34.5 | 14.7 | 19.8 | - | - | - | - | - | - | - | - |
| Lab Testing Fees | 34.5 | 26.2 | 8.3 | 119,905 | 2,727 | 106,035 | 2,411 | 108,368 | 2,464 | 108,368 | 2,464 |
| Outside Contractors | 34.5 | 30.9 | 3.6 | 835,662 | 8,242 | 861,094 | 8,493 | 880,038 | 8,680 | 880,038 | 8,680 |
| Outside Professional Services | 34.5 | 45.0 | (10.5) | 78,784 | (2,266) | 45,134 | (1,298) | 46,127 | (1,327) | 46,127 | (1,327) |
| Rental - Building/Real Property | 34.5 | (13.2) | 47.7 | - | - | - | - | - | - | - | - |
| Rental of Equipment | 34.5 | 7.9 | 26.6 | - | - | - | - | - | - | - | - |
| Transportation Expense | 34.5 | 38.1 | (3.6) | 401 | (4) | 411 | (4) | 420 | (4) | 420 | (4) |
| Prop& Gen Lib. Insurance | 34.5 | (130.5) | 165.0 | (60) | (27) | - | - | - | - | - | - |
| Worker Compensation | 34.5 | (130.5) | 165.0 | 9 | 4 | 1 | - | 1 | - | 1 | - |
| Regulatory Commission Expense | 34.5 | (101.5) | 136.0 | 10,288 | 3,833 | 10,221 | 3,808 | 10,153 | 3,783 | 13,682 | 5,098 |
| Office Expense and Utilities | 34.5 | 8.9 | 25.6 | 1,052 | 74 | 1,005 | 70 | 1,027 | 72 | 1,027 | 72 |
| Postage and Air Freight Expense | 34.5 | 40.3 | (5.8) | - | - | - | - | - | - | - | - |
| Other O&M | 34.5 | 30.3 | 4.2 | - | - | - | - | - | - | - | - |
| Real Estate Tax | 34.5 | (26.9) | 61.4 | - | - | - | - | - | - | - | - |
| Payroll | 34.5 | 18.5 | 16.0 | 3 | - | 4 | - | 4 | - | 4 | - |
| Federal Income Taxes | 34.5 | 37.0 | (2.5) | - | - | 14,689 | (101) | (30,418) | 208 | 57,482 | (394) |
| State Income Taxes | 34.5 | 28.8 | 5.8 | - | - | 6,100 | 96 | (13,232) | (208) | 23,688 | 373 |
| Total | | | | \$ 12,881 | | \$ 13,797 | | \$ 13,998 | | \$ 15,292 | |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF TOTAL REVENUE LAG DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| Period | Billing Type | Service & Billing Lag | Revenue Billed | Weighted Days | Days/Mo | Average Billing | Adjusted Average A/R Balance | Collection Lag | Weighted Collection Lag | Total Revenue Lag |
|--------|--------------|-----------------------|---------------------|---------------|---------|-----------------|------------------------------|----------------|-------------------------|-------------------|
| (a) | (b) | (c) | (d) | (e) | (g) | (h) | (i) | (j) | (k) | (l) |
| Oct-22 | Monthly | 15.2 | \$4,882,408 | 1.3 | 31 | \$157,497 | \$3,285,878 | 20.86 | 1.9 | |
| Nov-22 | Monthly | 15.2 | 4,563,966 | 1.2 | 30 | \$152,132 | 3,091,811 | 20.32 | 1.8 | |
| Dec-22 | Monthly | 15.2 | 4,529,946 | 1.2 | 31 | \$146,127 | 2,933,716 | 20.08 | 1.6 | |
| Jan-23 | Monthly | 15.2 | 4,657,342 | 1.2 | 31 | \$150,237 | 2,945,719 | 19.61 | 1.6 | |
| Feb-23 | Monthly | 15.2 | 4,467,326 | 1.2 | 28 | \$159,547 | 3,008,305 | 18.86 | 1.6 | |
| Mar-23 | Monthly | 15.2 | 4,510,058 | 1.2 | 31 | \$145,486 | 2,931,452 | 20.15 | 1.6 | |
| Apr-23 | Monthly | 15.2 | 4,621,924 | 1.2 | 30 | \$154,064 | 3,055,673 | 19.83 | 1.7 | |
| May-23 | Monthly | 15.2 | 4,621,866 | 1.2 | 31 | \$149,092 | 3,106,886 | 20.84 | 1.8 | |
| Jun-23 | Monthly | 15.2 | 4,984,269 | 1.3 | 30 | \$166,142 | 2,977,968 | 17.92 | 1.5 | |
| Jul-23 | Monthly | 15.2 | 5,081,467 | 1.4 | 31 | \$163,918 | 2,956,453 | 18.04 | 1.5 | |
| Aug-23 | Monthly | 15.2 | 4,904,463 | 1.3 | 31 | \$158,208 | 2,797,700 | 17.68 | 1.4 | |
| Sep-23 | Monthly | 15.2 | 5,098,869 | 1.4 | 30 | \$169,962 | 2,772,309 | 16.31 | 1.3 | |
| Total | | | <u>\$56,923,904</u> | <u>15.2</u> | | | <u>\$35,863,870</u> | | <u>19.3</u> | <u>34.5</u> |

| | | |
|--|------------------------------|----------------------------|
| Average Number Of Days Covered In A Bill | 30.417 | |
| Divided By | <u>2</u> | |
| Mid-point of Service Period Based On Monthly Billing | 15.209 | |
| Average Billing Lag of the A/R Post Date From Meter Read | <u>0.0020</u> | |
| Total Service Period & Billing Lag | <u>15.211</u> | |
| <u>2023 CS DATA</u> | | |
| Total bills | 836,280 | |
| Estimated | 17,803 were held for 5 days. | |
| | Days Between | |
| | <u>Read To Posting</u> | |
| 835,951 | x 0 days | 0 |
| 329 | x 5 days | 1,645 |
| | | <u>1,645</u> Weighted days |
| Weighted days | | 1,645 |
| Total bills | | <u>836,280</u> |
| Average Billing Lag of the A/R Post Date From Meter Read | | <u>0.0020</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF LABOR EXPENSE LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> | <u>(Lead)/ Lag Days</u> | <u>Amount</u> | <u>Weighted Amount</u> |
|-------------------------------------|-----------------------------|-----------------------|----------------------------|
| (1) | (2) | (3) | (4) |
| October-22 | 11.5 | \$402,092.66 | \$4,624,065.59 |
| November-22 | 11.5 | 640,326.86 | 7,363,758.89 |
| December-22 | 11.5 | 412,840.67 | 4,747,667.71 |
| January-23 | 11.5 | 423,084.76 | 4,865,474.74 |
| February-23 | 11.5 | 411,035.69 | 4,726,910.44 |
| March-23 | 10.9 | 769,666.79 | 8,352,178.76 |
| April-23 | 11.0 | 408,509.21 | 4,489,762.85 |
| May-23 | 11.5 | 604,320.27 | 6,949,683.11 |
| June-23 | 11.5 | 423,834.29 | 4,874,094.34 |
| July-23 | 11.5 | 438,913.11 | 5,047,500.77 |
| August-23 | 11.6 | 451,950.05 | 5,244,915.96 |
| September-23 | 11.5 | 457,174.74 | 5,257,509.51 |
| Total Labor Expense Lead Days | <u>11.4</u> | <u>\$5,843,749.10</u> | <u>\$66,543,522.64</u> |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF EMPLOYEE GROUP HEALTH & LIFE LEAD DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|----------------------|-----------------------------------|
| October-22 | 3.0 | \$16,311.19 | \$48,933.57 |
| November-22 | (0.0) | 16,634.34 | -165.84 |
| December-22 | 0.9 | 16,314.12 | 14,620.13 |
| January-23 | 4.4 | 9,614.20 | 42,081.58 |
| February-23 | 11.4 | 20,390.65 | 232,960.38 |
| March-23 | 6.4 | 14,688.16 | 93,487.19 |
| April-23 | 5.8 | 15,036.46 | 86,890.08 |
| May-23 | 7.9 | 10,647.86 | 83,824.07 |
| June-23 | 10.5 | 7,181.37 | 75,404.39 |
| July-23 | 8.3 | 13,215.40 | 109,058.41 |
| August-23 | 17.0 | 2,145.58 | 36,474.86 |
| September-23 | 27.8 | 34,445.72 | 958,436.95 |
| Total Employee Group Health & Life Lead Days | <u>10.1</u> | <u>\$176,625.05</u> | <u>\$1,782,005.77</u> |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF EMPLOYEE PENSION BENEFITS LEAD DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> | <u>(Lead)/ Lag Days</u> | <u>Amount</u> | <u>Weighted Amount</u> |
|---|-----------------------------|---------------------|----------------------------|
| (1) | (2) | (3) | (4) |
| December-22 | 29.5 | \$186,472.00 | \$5,500,924.00 |
| March-23 | 29.5 | 123,752.00 | 3,650,684.00 |
| June-23 | 28.5 | 123,752.00 | 3,526,932.00 |
| September-23 | <u>29.5</u> | <u>123,752.00</u> | <u>3,650,684.00</u> |
| Total Employee Pension Benefits Lead Days | <u>29.3</u> | <u>\$557,728.00</u> | <u>\$16,329,224.00</u> |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF OTHER EMPLOYEE BENEFITS LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|---|------------------------------------|----------------------|-----------------------------------|
| April-23 | <u>276.0</u> | <u>\$123,283.52</u> | <u>\$34,026,251.52</u> |
| Total Other Employee Benefits Lead Days | <u>276.0</u> | <u>\$123,283.52</u> | <u>\$34,026,251.52</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF PURCHASED WATER LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|-----------------------|-----------------------------------|
| October-22 | 25.7 | \$118,531.63 | \$3,041,270.18 |
| November-22 | 22.9 | 147,714.99 | 3,377,255.67 |
| December-22 | 27.8 | 87,268.28 | 2,424,333.48 |
| January-23 | 12.2 | 52,908.82 | 647,214.38 |
| February-23 | 42.1 | 226,715.38 | 9,534,635.79 |
| March-23 | 25.9 | 132,725.98 | 3,443,169.93 |
| April-23 | 30.1 | 113,047.87 | 3,405,504.05 |
| May-23 | 21.0 | 128,573.57 | 2,704,383.44 |
| June-23 | 25.3 | 139,098.86 | 3,519,747.31 |
| July-23 | 19.8 | 138,517.05 | 2,747,611.38 |
| August-23 | 23.5 | 146,775.07 | 3,449,829.16 |
| September-23 | 24.7 | 138,959.19 | 3,437,261.09 |
| Total Purchased Water Lead Days | <u>26.6</u> | <u>\$1,570,836.69</u> | <u>\$41,732,215.84</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF PURCHASED POWER LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> | <u>(Lead)/ Lag Days</u> | <u>Amount</u> | <u>Weighted Amount</u> |
|---------------------------------------|-----------------------------|-----------------------|----------------------------|
| (1) | (2) | (3) | (4) |
| October-22 | 30.0 | \$34,872.49 | \$1,047,713.90 |
| November-22 | 40.2 | 137,640.33 | 5,531,943.82 |
| December-22 | 41.6 | 128,429.34 | 5,344,995.25 |
| January-23 | 36.0 | 106,753.88 | 3,847,550.27 |
| February-23 | 34.7 | 80,814.03 | 2,801,627.62 |
| March-23 | 47.4 | 167,610.51 | 7,946,416.97 |
| April-23 | 41.0 | 193,355.36 | 7,931,141.79 |
| May-23 | 45.0 | 225,361.78 | 10,135,457.08 |
| June-23 | 85.0 | 277,561.43 | 23,605,532.25 |
| July-23 | 72.5 | 222,934.18 | 16,163,555.14 |
| August-23 | 85.2 | 331,201.00 | 28,232,167.61 |
| September-23 | 35.9 | 176,823.29 | 6,340,986.95 |
| Total Purchased Power Lead Days | <u>57.1</u> | <u>\$2,083,357.62</u> | <u>\$118,929,088.62</u> |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF FUEL FOR POWER PRODUCTION LEAD DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|----------------------|-----------------------------------|
| April-23 | 29.0 | \$62.79 | \$1,820.91 |
| July-23 | 22.5 | 91.00 | 2,047.50 |
| August-23 | 27.8 | 1,983.06 | 55,085.15 |
| September-23 | <u>161.0</u> | <u>195.57</u> | <u>31,486.77</u> |
| Total Fuel For Power Production Lead Days | <u>38.8</u> | <u>\$2,332.42</u> | <u>\$90,440.33</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF CHEMICALS LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|---------------------------|-----------------------------------|
| October-22 | 20.0 | \$104,971.77 | \$2,096,977.79 |
| November-22 | 24.2 | 57,453.95 | 1,391,664.58 |
| December-22 | 30.9 | 98,600.72 | 3,044,880.18 |
| January-23 | (8.8) | 46,520.79 | -407,191.31 |
| February-23 | 20.9 | 81,111.93 | 1,693,067.18 |
| March-23 | 52.0 | 80,931.06 | 4,204,541.21 |
| April-23 | 23.3 | 69,916.32 | 1,629,443.72 |
| May-23 | 47.7 | 95,918.83 | 4,576,206.95 |
| June-23 | 21.9 | 117,104.93 | 2,567,247.00 |
| July-23 | 53.2 | 120,651.90 | 6,424,405.51 |
| August-23 | 15.1 | 102,336.53 | 1,549,352.64 |
| September-23 | 14.5 | 116,547.62 | 1,686,498.42 |
| Total Chemicals Lead Days | <u>27.9</u> | <u>\$1,092,066.35</u> | <u>\$30,457,093.87</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF MATERIALS AND SUPPLIES LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|------------------------|-----------------------------------|
| October-22 | 30.0 | \$666.20 | \$19,986.00 |
| November-22 | 33.9 | 3,258.82 | 110,469.28 |
| December-22 | 30.0 | 273.50 | 8,205.00 |
| January-23 | 39.8 | 848.95 | 33,804.51 |
| February-23 | 29.6 | 2,789.56 | 82,572.55 |
| March-23 | 29.6 | 5,266.02 | 155,853.43 |
| April-23 | 30.0 | 9,841.48 | 295,115.04 |
| May-23 | 40.8 | 6,458.10 | 263,203.68 |
| June-23 | 33.0 | 3,168.92 | 104,571.37 |
| July-23 | 23.2 | 9,318.88 | 216,417.37 |
| August-23 | 30.5 | 2,809.62 | 85,636.49 |
| September-23 | <u>23.0</u> | <u>12,221.89</u> | <u>280,649.95</u> |
| Total Materials And Supplies Lead Days | <u>29.1</u> | <u>\$56,921.94</u> | <u>\$1,656,484.67</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF MANAGEMENT AND SERVICE FEES LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|-----------------------|-----------------------------------|
| October-22 | 15.0 | \$320,657.90 | \$4,809,868.50 |
| November-22 | 14.5 | 362,352.41 | 5,254,109.95 |
| December-22 | 15.0 | 346,651.44 | 5,199,771.60 |
| January-23 | 15.0 | 393,632.38 | 5,904,485.70 |
| February-23 | 13.5 | 328,172.36 | 4,430,326.86 |
| March-23 | 15.0 | 377,795.21 | 5,666,928.15 |
| April-23 | 14.5 | 355,645.61 | 5,156,861.35 |
| May-23 | 15.0 | 371,099.98 | 5,566,499.70 |
| June-23 | 14.5 | 266,510.21 | 3,864,398.05 |
| July-23 | 15.0 | 323,119.54 | 4,846,793.10 |
| August-23 | 15.0 | 257,589.14 | 3,863,837.10 |
| September-23 | 14.5 | 303,316.72 | 4,398,092.44 |
| Total Management And Service Fees Lead Days | <u>14.7</u> | <u>\$4,006,542.90</u> | <u>\$58,961,972.49</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF LAB TESTING FEES LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|----------------------|-----------------------------------|
| October-22 | 28.0 | \$5,647.50 | \$158,130.00 |
| November-22 | 39.6 | 28,142.20 | 1,113,326.06 |
| December-22 | 29.5 | 2,335.00 | 68,970.00 |
| January-23 | 31.2 | 33,065.22 | 1,032,706.09 |
| February-23 | 16.2 | 11,786.25 | 190,972.50 |
| March-23 | 30.1 | 43,030.58 | 1,296,978.40 |
| April-23 | 28.9 | 37,054.00 | 1,070,081.00 |
| May-23 | 28.1 | 19,266.25 | 540,894.50 |
| June-23 | 29.5 | 57,373.50 | 1,692,099.00 |
| July-23 | 31.1 | 28,038.00 | 872,469.00 |
| August-23 | (34.6) | 20,074.48 | -694,923.78 |
| September-23 | 29.5 | 43,593.75 | 1,285,824.00 |
| Total Lab Testing Fees Lead Days | <u>26.2</u> | <u>\$329,406.73</u> | <u>\$8,627,526.77</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF OUTSIDE CONTRACTORS LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|---|------------------------------------|-----------------------|-----------------------------------|
| October-22 | 25.6 | \$69,229.44 | \$1,775,646.77 |
| November-22 | 30.0 | 293,673.67 | 8,804,291.84 |
| December-22 | 26.6 | 29,234.51 | 778,667.26 |
| January-23 | 39.2 | 438,332.23 | 17,202,026.26 |
| February-23 | 50.8 | 152,170.15 | 7,725,608.13 |
| March-23 | 22.5 | 315,147.98 | 7,097,823.32 |
| April-23 | 39.2 | 152,302.78 | 5,964,973.77 |
| May-23 | 30.5 | 313,164.45 | 9,566,414.48 |
| June-23 | 32.2 | 331,948.13 | 10,683,775.55 |
| July-23 | 20.3 | 309,861.75 | 6,277,822.30 |
| August-23 | 24.1 | 246,342.32 | 5,940,548.33 |
| September-23 | 31.8 | 163,579.89 | 5,205,931.93 |
| Total Outside Contractors Lead Days | <u>30.9</u> | <u>\$2,814,987.30</u> | <u>\$87,023,529.94</u> |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF OUTSIDE PROFESSIONAL SERVICES LEAD DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|----------------------|-----------------------------------|
| October-22 | 50.0 | \$38,507.32 | \$1,926,838.84 |
| November-22 | 53.6 | 12,423.79 | 666,380.13 |
| December-22 | 57.1 | 8,110.22 | 462,983.60 |
| January-23 | 29.0 | 24,787.12 | 719,422.13 |
| February-23 | 24.4 | 6,142.24 | 149,765.22 |
| March-23 | 61.4 | 104,177.98 | 6,397,172.48 |
| April-23 | 35.2 | 41,503.27 | 1,459,407.46 |
| May-23 | 27.2 | 9,598.45 | 261,482.23 |
| June-23 | 30.7 | 29,793.57 | 915,714.06 |
| July-23 | 31.1 | 9,107.81 | 283,072.92 |
| August-23 | 33.1 | 12,744.97 | 421,232.64 |
| September-23 | 40.8 | 71,182.74 | 2,902,741.79 |
| Total Outside Professional Services Lead Days | <u>45.0</u> | <u>\$368,079.48</u> | <u>\$16,566,213.50</u> |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF RENTAL - BUILDING/REAL PROPERTY LEAD DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| Month of Payment | (Lead)/ Lag Days | Amount | Weighted Amount |
|--|---------------------|---------------------|------------------------|
| (1) | (2) | (3) | (4) |
| October-22 | (12.0) | \$12,681.00 | -\$152,172.00 |
| November-22 | (13.5) | 12,681.00 | -171,193.50 |
| December-22 | (14.0) | 12,681.00 | -177,534.00 |
| January-23 | (12.0) | 12,681.00 | -152,172.00 |
| February-23 | (12.5) | 13,061.00 | -163,262.50 |
| March-23 | (14.0) | 13,061.00 | -182,854.00 |
| April-23 | (11.5) | 13,061.00 | -150,201.50 |
| May-23 | (14.0) | 13,061.00 | -182,854.00 |
| June-23 | (13.5) | 13,061.00 | -176,323.50 |
| July-23 | (13.0) | 13,061.00 | -169,793.00 |
| August-23 | (14.0) | 13,061.00 | -182,854.00 |
| September-23 | (14.5) | 13,061.00 | -189,384.50 |
| Total Rental - Building/Real Property Lead Days | <u>(13.2)</u> | <u>\$155,212.00</u> | <u>-\$2,050,598.50</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF RENTAL OF EQUIPMENT LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|---|------------------------------------|----------------------|-----------------------------------|
| October-22 | (11.5) | \$201.11 | -\$2,304.60 |
| November-22 | 17.0 | 354.67 | 6,029.39 |
| December-22 | (14.0) | 486.52 | -6,811.28 |
| January-23 | 18.7 | 1,140.00 | 21,285.88 |
| February-23 | 18.0 | 280.73 | 5,053.14 |
| March-23 | 15.0 | 347.20 | 5,208.00 |
| April-23 | (0.2) | 1,312.28 | -215.82 |
| May-23 | 14.4 | 980.17 | 14,099.68 |
| June-23 | (2.6) | 953.06 | -2,470.94 |
| July-23 | 9.0 | 760.16 | 6,838.88 |
| August-23 | 21.2 | 1,313.18 | 27,809.75 |
| September-23 | 0.8 | 1,439.21 | 1,165.67 |
| Total Rental Of Equipment Lead Days | <u>7.9</u> | <u>\$9,568.29</u> | <u>\$75,687.76</u> |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF TRANSPORTATION EXPENSE LEAD DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|---|------------------------------------|----------------------|-----------------------------------|
| October-22 | (206.5) | \$3,404.72 | -\$703,074.68 |
| November-22 | 43.1 | 51,815.09 | 2,232,960.12 |
| December-22 | 41.7 | 1,492.73 | 62,181.28 |
| January-23 | 38.9 | 92,862.18 | 3,613,557.14 |
| February-23 | 27.5 | 14,305.64 | 393,600.09 |
| March-23 | 38.7 | 88,464.00 | 3,421,103.17 |
| April-23 | 38.0 | 81,719.40 | 3,108,980.16 |
| May-23 | 27.8 | 8,291.44 | 230,694.41 |
| June-23 | 38.3 | 44,394.76 | 1,701,105.73 |
| July-23 | 42.8 | 65,052.45 | 2,786,530.16 |
| August-23 | 43.2 | 70,825.44 | 3,061,960.06 |
| September-23 | 38.2 | 61,323.95 | 2,341,647.31 |
| Total Transportation Expense Lead Days | <u>38.1</u> | <u>\$583,951.80</u> | <u>\$22,251,244.93</u> |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF PROP& GEN LIAB. INSURANCE LEAD DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|----------------------|-----------------------------------|
| February-23 | <u>(130.5)</u> | <u>\$960,810.00</u> | <u>-\$125,385,705.00</u> |
| Total Prop& Gen Liab. Insurance Lead Days | <u>(130.5)</u> | <u>\$960,810.00</u> | <u>-\$125,385,705.00</u> |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF WORKER COMPENSATION LEAD DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|---|------------------------------------|----------------------|-----------------------------------|
| February-23 | (130.5) | \$277,677.00 | -36,236,848.50 |
| Total Worker Compensation Lead Days | <u>(130.5)</u> | <u>\$277,677.00</u> | <u>-\$36,236,848.50</u> |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF REGULATORY COMMISSION EXPENSE LEAD DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| Month of Payment <u>(1)</u> | (Lead)/ Lag Days <u>(2)</u> | Amount <u>(3)</u> | Weighted Amount <u>(4)</u> |
|--|-----------------------------------|----------------------|----------------------------------|
| September-23 | (101.5) | \$331,952.00 | -\$33,693,128.00 |
| Total Regulatory Commission Expense Lead Days | (101.5) | \$331,952.00 | -\$33,693,128.00 |

VEOLIA WATER PENNSYLVANIA, INC.
 CALCULATION OF OFFICE EXPENSE AND UTILITIES LEAD DAYS
 BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|---|------------------------------------|----------------------|-----------------------------------|
| October-22 | 28.3 | \$27,887.53 | \$788,465.82 |
| November-22 | 23.9 | 36,968.90 | 882,416.38 |
| December-22 | 35.0 | 26,226.46 | 919,002.36 |
| January-23 | 33.5 | 92,620.42 | 3,104,620.17 |
| February-23 | 37.1 | 143,408.88 | 5,326,542.02 |
| March-23 | 21.3 | 44,846.02 | 956,943.39 |
| April-23 | 33.4 | 52,201.04 | 1,741,423.76 |
| May-23 | (78.1) | 82,732.11 | -6,458,734.41 |
| June-23 | (46.3) | 45,321.63 | -2,098,041.01 |
| July-23 | 6.4 | 43,016.12 | 273,648.25 |
| August-23 | (0.1) | 54,670.22 | -6,304.65 |
| September-23 | 25.0 | 22,318.90 | 557,536.79 |
| Total Office Expense And Utilities Lead Days | <u>8.9</u> | <u>\$672,218.23</u> | <u>\$5,987,518.87</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF POSTAGE AND AIR FREIGHT EXPENSE LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|----------------------|-----------------------------------|
| October-22 | 13.5 | \$55.43 | \$748.31 |
| November-22 | 24.6 | 419.16 | 10,300.63 |
| December-22 | 30.0 | 387.02 | 11,610.60 |
| January-23 | 31.7 | 1,095.94 | 34,698.14 |
| February-23 | 28.1 | 694.61 | 19,519.00 |
| March-23 | 24.6 | 1,771.58 | 43,556.52 |
| April-23 | 29.0 | 62.57 | 1,814.53 |
| May-23 | 29.8 | 101.35 | 3,016.73 |
| June-23 | 88.8 | 1,129.07 | 100,278.25 |
| July-23 | 68.8 | 1,523.94 | 104,817.92 |
| August-23 | 17.0 | 1,598.48 | 27,174.16 |
| September-23 | 29.6 | 86.06 | 2,543.28 |
| Total Postage And Air Freight Expense Lead Days | <u>40.3</u> | <u>\$8,925.21</u> | <u>\$360,078.06</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF OTHER O&M LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> | <u>(Lead)/ Lag Days</u> | <u>Amount</u> | <u>Weighted Amount</u> |
|---------------------------------|-----------------------------|--------------------|----------------------------|
| (1) | (2) | (3) | (4) |
| October-22 | 14.7 | \$6,250.61 | \$91,938.38 |
| November-22 | 21.3 | 4,561.94 | 96,984.41 |
| December-22 | (13.0) | 4,056.48 | -52,856.57 |
| January-23 | 17.2 | 2,793.30 | 48,010.61 |
| February-23 | 10.3 | 4,348.43 | 44,838.48 |
| March-23 | 34.8 | 7,671.02 | 266,992.02 |
| April-23 | 13.2 | 2,608.10 | 34,344.86 |
| May-23 | 19.7 | 1,258.45 | 24,794.71 |
| June-23 | 18.6 | 1,980.87 | 36,805.38 |
| July-23 | 21.0 | 1,734.44 | 36,457.85 |
| August-23 | 35.9 | 1,376.81 | 49,359.71 |
| September-23 | 89.6 | 8,298.19 | 743,272.49 |
| | | | |
| Total Other O&M Lead Days | <u>30.3</u> | <u>\$46,938.64</u> | <u>\$1,420,942.32</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF REAL ESTATE TAX LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> | <u>(Lead)/ Lag Days</u> | <u>Amount</u> | <u>Weighted Amount</u> |
|---------------------------------------|-----------------------------|---------------------|----------------------------|
| (1) | (2) | (3) | (4) |
| October-22 | (154.0) | \$31,797.55 | -\$4,896,488.40 |
| November-22 | (20.6) | 31,896.49 | -657,319.13 |
| December-22 | (15.0) | 31,896.65 | -477,491.80 |
| January-23 | (12.3) | 31,873.18 | -393,608.04 |
| February-23 | (8.2) | 31,873.17 | -260,912.16 |
| March-23 | (3.0) | 31,873.15 | -96,343.55 |
| April-23 | (13.0) | 32,002.68 | -417,209.04 |
| May-23 | (1.0) | 32,016.81 | -32,016.81 |
| June-23 | (0.5) | 5,016.76 | -2,508.38 |
| July-23 | (1.0) | 5,016.85 | -5,016.85 |
| August-23 | (31.0) | 5,016.74 | -155,518.94 |
| September-23 | (1.0) | 5,016.75 | -5,016.75 |
| Total Real Estate Tax Lead Days | <u>(26.9)</u> | <u>\$275,296.78</u> | <u>-\$7,399,449.85</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF PAYROLL TAX LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Month of Payment</u> (1) | <u>(Lead)/ Lag Days</u> (2) | <u>Amount</u> (3) | <u>Weighted Amount</u> (4) |
|--|------------------------------------|----------------------|-----------------------------------|
| October-22 | 18.5 | \$26,577.55 | \$491,684.68 |
| November-22 | 18.5 | 27,830.91 | 514,871.84 |
| December-22 | 18.5 | 28,222.27 | 522,112.00 |
| January-23 | 18.5 | 28,061.45 | 519,136.83 |
| February-23 | 18.5 | 27,018.95 | 499,850.58 |
| March-23 | 18.7 | 64,709.91 | 1,208,985.55 |
| April-23 | 18.5 | 27,001.67 | 499,530.90 |
| May-23 | 18.5 | 26,719.98 | 494,319.63 |
| June-23 | 18.5 | 27,313.86 | 505,306.41 |
| July-23 | 18.5 | 28,343.10 | 524,347.35 |
| August-23 | 18.6 | 44,466.46 | 825,768.59 |
| September-23 | 18.5 | 30,218.38 | 559,040.03 |
| | | | |
| Total Payroll Tax Lead Days | <u>18.5</u> | <u>\$386,484.49</u> | <u>\$7,164,954.36</u> |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF FEDERAL INCOME TAXES LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Service Period</u> | | <u>Payment</u> | <u>(Lead)/</u> | | <u>Weighted</u> |
|-----------------------------|-----------|----------------|-----------------|---------------|-----------------|
| <u>From</u> | <u>To</u> | <u>Date</u> | <u>Lag Days</u> | <u>Amount</u> | <u>Amount</u> |
| (1) | (2) | (3) | (4) | (5) | (6) |
| <u>Federal Income Taxes</u> | | | | | |
| 1/1/22 | 12/31/22 | 12/15/22 | 166.0 | 25% | 41.5 |
| 1/1/23 | 12/31/23 | 4/17/23 | (76.0) | 25% | (19.0) |
| 1/1/23 | 12/31/23 | 6/15/23 | (17.0) | 25% | (4.3) |
| 1/1/23 | 12/31/23 | 9/15/23 | 75.0 | 25% | 18.8 |
| Total Federal Income Taxes | | | 37.0 | 100% | 37.0 |

VEOLIA WATER PENNSYLVANIA, INC.
CALCULATION OF STATE INCOME TAXES LEAD DAYS
BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING SEPTEMBER 30, 2023

| <u>Service Period</u> | | <u>Payment</u> | <u>(Lead)/</u> | | <u>Weighted</u> |
|---------------------------|-----------|----------------|-----------------|---------------|-----------------|
| <u>From</u> | <u>To</u> | <u>Date</u> | <u>Lag Days</u> | <u>Amount</u> | <u>Amount</u> |
| (1) | (2) | (3) | (4) | (5) | (6) |
| <u>State Income Taxes</u> | | | | | |
| 1/1/22 | 12/31/22 | 12/15/22 | 166.0 | 25% | 41.5 |
| 1/1/23 | 12/31/23 | 3/15/23 | (109.0) | 25% | (27.3) |
| 1/1/23 | 12/31/23 | 6/15/23 | (17.0) | 25% | (4.3) |
| 1/1/23 | 12/31/23 | 9/15/23 | 75.0 | 25% | 18.8 |
| Total State Income Taxes | | | 28.8 | 100% | 28.8 |