## Indian Hills Operating Company, Inc. Table of Contents to Schedule DWD-01 of Dylan W. D'Ascendis, CRRA, CVA

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## Indian Hills Utility Operating Company, Inc. Recommended Capital Structure and Cost Rates for Ratemaking Purposes Estimated at December 31, 2017

Type Of Capital	Ratios (1)	Cost Rate	Weighted Cost Rate
Long-Term Debt	77.12%	14.00% (1)	10.80%
Common Equity	22.88%	15.20% (2)	3.48%
Total	100.00%		14.28%

#### Notes:

- (1) Company-Provided.
- (2) From page 2 of this Sub-Schedule.

#### Indian Hills Utility Operating Company, Inc. **Brief Summary of Common Equity Cost Rate**

Line No.	Principal Methods	Proxy Group of Eight Water Companies
1.	Discounted Cash Flow Model (DCF) (1)	8.63 %
2.	Risk Premium Model (RPM) (2)	10.75
3.	Capital Asset Pricing Model (CAPM) (3)	10.21
4.	Market Models Applied to Comparable Risk, Non-Price Regulated Companies (4)	11.38
5.	Indicated Common Equity Cost Rate before Adjustment for Business Risks	10.35 %
6.	Financial Risk Adjustment (5)	2.49
7.	Size Risk Adjustment (6)	2.38
8.	Indicated Common Equity Cost Rate	
9.	Recommended Common Equity Cost Rate	<u>15.20</u> %

- Notes: (1) From Sub-Schedule DWD-3.
  - (2) From page 1 of Sub-Schedule DWD-4.
  - (3) From page 1 of Sub-Schedule DWD-5.
  - (4) From page 1 of Sub-Schedule DWD-7.
  - (5) From Sub-Schedule DWD-8
  - (6) From Sub-Schedule DWD-9.

#### Proxy Group of Eight Water Companies CAPITALIZATION AND FINANCIAL STATISTICS (1) 2012 - 2016, Inclusive

	<u>2016</u>	<u>2015</u> (MILL	<u>2014</u> JONS OF DOLLAR	<u>2013</u> S)	<u>2012</u>	
CAPITALIZATION STATISTICS				,		
AMOUNT OF CAPITAL EMPLOYED TOTAL PERMANENT CAPITAL SHORT-TERM DEBT TOTAL CAPITAL EMPLOYED	\$2,399.854 \$137.724 \$2,537.578	\$2,269.476 \$95.003 \$2,364.479	\$2,156.407 \$72.459 \$2,228.866	\$2,058.747 \$95.589 \$2,154.336	\$1,998.358 \$60.594 \$2,058.952	
INDICATED AVERAGE CAPITAL COST RATES (2) TOTAL DEBT PREFERRED STOCK CAPITAL STRUCTURE RATIOS	4.73 % 5.42 %	4.89 % 5.42 %	5.01 % 5.30 %	5.19 % 5.51 %	5.36 % 5.53 %	<u>5 YEAR</u> AVERAGE
BASED ON TOTAL PERMANENT CAPITAL: LONG-TERM DEBT PREFERRED STOCK COMMON EQUITY TOTAL	46.13 % 0.12 53.75 100.00 %	46.25 % 0.12 53.63 100.00 %	45.71 % 0.13 <u>54.16</u> <u>100.00</u> %	46.24 % 0.16 <u>53.60</u> <u>100.00</u> %	49.32 % 0.18 50.50 100.00 %	46.73 % 0.14 53.13 100.00 %
BASED ON TOTAL CAPITAL: TOTAL DEBT, INCLUDING SHORT-TERM PREFERRED STOCK COMMON EQUITY TOTAL	48.59 % 0.11 51.30 100.00 %	47.63 % 0.12 52.25 100.00 %	47.00 % 0.13 52.87 100.00 %	47.77 % 0.15 52.08 100.00 %	50.87 % 0.17 48.96 100.00 %	48.37 % 0.14 51.49 100.00 %
FINANCIAL STATISTICS						
FINANCIAL RATIOS - MARKET BASED  EARNINGS / PRICE RATIO  MARKET / AVERAGE BOOK RATIO  DIVIDEND YIELD  DIVIDEND PAYOUT RATIO	4.01 % 274.64 2.17 55.72	4.72 % 224.46 2.66 56.71	5.44 % 212.84 2.76 52.46	4.84 % 206.33 2.88 58.35	5.47 % 187.65 3.17 60.42	4.90 % 221.18 2.73 56.73
RATE OF RETURN ON AVERAGE BOOK COMMON EQUITY	10.83 %	10.40 %	11.38 %	10.08 %	10.12 %	10.56 %
TOTAL DEBT / EBITDA (3)	3.63 X	3.64 X	3.40 X	3.65 X	3.83 X	3.63 X
FUNDS FROM OPERATIONS / TOTAL DEBT (4)	22.17 %	24.05 %	25.95 %	22.85 %	20.86 %	23.18 %
TOTAL DEBT / TOTAL CAPITAL	48.59 %	47.63 %	47.00 %	47.77 %	50.87 %	48.37 %

#### Notes

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group, and are based upon financial statements as originally reported in each year.
- (2) Computed by relating actual total debt interest or preferred stock dividends booked to average of beginning and ending total debt or preferred stock reported to be outstanding.
- (3) Total debt relative to EBITDA (Earnings before Interest, Income Taxes, Depreciation and Amortization).
- (4) Funds from operations (sum of net income, depreciation, amortization, net deferred income tax and investment tax credits, less total AFUDC) plus interest charges as a percentage of total debt.

Source of Information: Company Annual Forms 10-K

### Capital Structure Based upon Total Permanent Capital for the Proxy Group of Eight Water Companies 2012 - 2016, Inclusive

Common Equity   Common Equit		<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	2012	<u>5 YEAR</u> AVERAGE
Dang-Frem Debt	American States Water Co.						
Preferred Stock		39.40 %	41.15 %	39.15 %	40.30 %	42.49 %	40.50 %
Common Equity   G0.60   S8.85   G0.85   G0.97   G0.00   G0.	-						
Manerican Water Works Company Inc.   Long-Term Debt   S4.74   S3.89   S2.70   S2.42   S4.30   S3.61   % Preferred Stock   0.09   0.11   0.15   0.17   0.12   0.15   Common Equity   45.17   46.00   47.15   47.41   45.49   46.24   Total Capital   0.000   \$					100.00 %	100.00 %	100.00 %
No.   Preferred Stock   S4.74   S3.89   S2.70   S2.42   S4.30   S3.61   S6   Preferred Stock   0.09   0.11   0.15   0.17   0.15   0.17   0.15   0.17   0.15   0.17   0.15   0.17   0.15   0.17   0.15   0.17   0.15   0.17   0.15   0.17   0.15   0.17   0.10   S7   0.10   C1000   S7   0.000	•						
Prefered Stock	American Water Works Company Inc						
Common Equity   Common Equit	Long-Term Debt	54.74 %	53.89 %	52.70 %	52.42 %	54.30 %	53.61 %
Total Capital   100.00 % 100	Preferred Stock	0.09	0.11	0.15	0.17	0.21	0.15
Capabil   Capa	Common Equity	45.17	46.00	47.15	47.41	45.49	46.24
Designation   Sole   Work   Sole   Work   Sole   Work   Sole   Work   Preferred Stock   O.00   O.00   O.00   O.00   O.01   O.01   O.00   O.0	Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Deng-Term Debt   So.81 %   So.76 %   49.45 %   So.32 %   33.41 %   So.95 %   Preferred Stock   O.00   O.00   O.00   O.01   O.01   O.00   O.0							
Prefered Stock							
Common Equity   49.19	_						
Total Capital   100.00 % 100							
California Water Service Group							
Common Equity	Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Common Equity	California Water Service Group						
Preferred Stock         0.00		45.83 %	44 69 %	40 46 %	42.03 %	50 39 %	44.68 %
Common Equity Total Capital   100.00	-						
Total Capital         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %           Connecticut Water Service Inc.         Long-Term Debt         46.02         %         44.54         %         45.91         %         47.34         %         49.03         %         46.57         %           Preferred Stock         0.18         0.19         0.20         0.20         0.21         0.20         Common Equity         53.80         55.27         53.89         52.46         50.76         53.23         Total Capital         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         11.06         %         100.00         %         100.00         %         11.16         %         11.16         %         11.16         %         11.16         %         11.16							
Connecticut Water Service Inc   Long-Term Debt   46.02 %   44.54 %   45.91 %   47.34 %   49.03 %   46.57 %   Preferred Stock   0.18   0.19   0.20   0.20   0.21   0.20   0.20   0.20   0.21   0.20				_			
Common Equity   Common Equit							
Preferred Stock         0.18         0.19         0.20         0.20         0.21         0.20           Common Equity         53.80         55.27         53.89         52.46         50.76         53.23           Total Capital         100.00	Connecticut Water Service Inc						
Common Equity   Total Capital   Total Capita	Long-Term Debt	46.02 %	44.54 %	45.91 %	47.34 %	49.03 %	46.57 %
Middlesex Water Co.	Preferred Stock	0.18	0.19	0.20	0.20	0.21	0.20
Middlesex Water Co.           Long-Term Debt         38.91 % 40.44 % 41.55 % 41.36 % 43.53 % 41.16 % Preferred Stock         0.67 0.69 0.71 0.88 1.02 0.79           Common Equity         60.42 58.87 57.74 57.76 55.45 58.05 Total Capital         58.05 100.00 % 100.00	Common Equity	53.80	55.27	53.89	52.46	50.76	53.23
None-Term Debt   38.91 %   40.44 %   41.55 %   41.36 %   43.53 %   41.16 %   40.67   0.69   0.71   0.88   1.02   0.79   1.000   1.00	Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
None-Term Debt   38.91 %   40.44 %   41.55 %   41.36 %   43.53 %   41.16 %   40.67   0.69   0.71   0.88   1.02   0.79   1.000   1.00							
Preferred Stock							
Common Equity Total Capital         60.42 100.00 % 1	9						
Total Capital   100.00 % 100.00 % 100.00 % 100.00 % 100.00 % 100.00 % 100.00 %   100.0							
SIW Corp   Cong-Term Debt   50.69 %   50.03 %   51.66 %   51.09 %   55.39 %   51.77 %   70.00   50.0							
Long-Term Debt         50.69 %         50.03 %         51.66 %         51.09 %         55.39 %         51.77 %           Preferred Stock         0.00         0.00         0.00         0.00         0.00         0.00         0.00           Common Equity         49.31         49.97         48.34         48.91         44.61         48.23           Total Capital         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         44.58 %         45.97 %         45.98 %         44.58 %         44.58 %         Preferred Stock         0.00	Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Long-Term Debt         50.69 %         50.03 %         51.66 %         51.09 %         55.39 %         51.77 %           Preferred Stock         0.00         0.00         0.00         0.00         0.00         0.00         0.00           Common Equity         49.31         49.97         48.34         48.91         44.61         48.23           Total Capital         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         44.81 %         45.07 %         45.98 %         44.58 %         44.58 %         Preferred Stock         0.00	SIW Corp						
Preferred Stock         0.00         0.00         0.00         0.00         0.00         0.00           Common Equity         49.31         49.97         48.34         48.91         44.61         48.23           Total Capital         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         44.88 %         44.88 %         45.97 %         45.98 %         44.58 %         45.71 %         45.07 %         45.98 %         44.58 %         44.58 %         45.71 %         46.13 %         46.13 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         46.73 %         46.73 %         46.73 %         46.73 %         46.73 %         46.73 %         76.72 %         46.73 %         46.73 %         76.72 %         76.72 %         76.72 %         76.72 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         76.73 %         <		50.69 %	50.03 %	51 66 %	51.09 %	55 39 %	51 77 %
Common Equity         49.31         49.97         48.34         48.91         44.61         48.23           Total Capital         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         44.58 %         44.58 %         45.77 %         45.98 %         44.58 %         44.58 %         45.71 %         45.07 %         45.98 %         44.58 %         44.58 %         46.13 %         55.54         55.19         54.93         54.02         55.42         50.00         9         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         46.73 %         46.73 %         46.73 %         46.73 %         46.73 %         46.73 %							
Total Capital         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         100.00         %         44.58         %         44.58         %         Preferred Stock         0.00 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>							
York Water Co.           Long-Term Debt         42.60 %         44.46 %         44.81 %         45.07 %         45.98 %         44.58 %           Preferred Stock         0.00         0.00         0.00         0.00         0.00         0.00         0.00           Common Equity         57.40         55.54         55.19         54.93         54.02         55.42           Total Capital         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         46.73 %           Proxy Group of Eight Water Companies         46.13 %         46.25 %         45.71 %         46.24 %         49.32 %         46.73 %           Preferred Stock         0.12         0.12         0.13         0.16         0.18         0.14           Common Equity         53.75         53.63         54.16         53.60         50.50         53.13							
Long-Term Debt         42.60 %         44.46 %         44.81 %         45.07 %         45.98 %         44.58 %           Preferred Stock         0.00         0.00         0.00         0.00         0.00         0.00         0.00           Common Equity         57.40         55.54         55.19         54.93         54.02         55.42           Total Capital         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         100.00 %         46.00 %         46.73 %         46.73 %         46.73 %         46.73 %         46.73 %         46.73 %         46.73 %         46.73 %         53.63 %         54.16 %         53.60 %         50.50 %         53.13	•						
Preferred Stock         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         55.42         55.19         54.93         54.02         55.42         55.42         100.00         %         46.73         %         46.73	York Water Co.						
Common Equity Total Capital         57.40   55.54   55.19   54.93   54.02   55.42   100.00 % 100.	Long-Term Debt	42.60 %	44.46 %	44.81 %	45.07 %	45.98 %	44.58 %
Proxy Group of Eight Water Companies         46.13 %         46.25 %         45.71 %         46.24 %         49.32 %         46.73 %           Preferred Stock         0.12         0.12         0.13         0.16         0.18         0.14           Common Equity         53.75         53.63         54.16         53.60         50.50         53.13	Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Proxy Group of Eight Water Companies         46.13 %         46.25 %         45.71 %         46.24 %         49.32 %         46.73 %           Preferred Stock         0.12         0.12         0.13         0.16         0.18         0.14           Common Equity         53.75         53.63         54.16         53.60         50.50         53.13		57.40	55.54	55.19	54.93	54.02	55.42
Long-Term Debt         46.13 %         46.25 %         45.71 %         46.24 %         49.32 %         46.73 %           Preferred Stock         0.12         0.12         0.13         0.16         0.18         0.14           Common Equity         53.75         53.63         54.16         53.60         50.50         53.13	Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Long-Term Debt         46.13 %         46.25 %         45.71 %         46.24 %         49.32 %         46.73 %           Preferred Stock         0.12         0.12         0.13         0.16         0.18         0.14           Common Equity         53.75         53.63         54.16         53.60         50.50         53.13							
Long-Term Debt         46.13 %         46.25 %         45.71 %         46.24 %         49.32 %         46.73 %           Preferred Stock         0.12         0.12         0.13         0.16         0.18         0.14           Common Equity         53.75         53.63         54.16         53.60         50.50         53.13							
Preferred Stock         0.12         0.12         0.13         0.16         0.18         0.14           Common Equity         53.75         53.63         54.16         53.60         50.50         53.13	· · · · · · · · · · · · · · · · · · ·		4667 0:			10.00.00	
Common Equity         53.75         53.63         54.16         53.60         50.50         53.13							
тотат Сарткат 100.00 % 100.00 % 100.00 % 100.00 % 100.00 % 100.00 %							
	Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %

Source of Information Annual Forms 10-K

# Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for Indian Hills Utility Operating Company, Inc. Proxy Group of Eight Water Companies

[8]	Indicated Common Equity Cost Rate (5)	7.24 % 10.00 9.11 10.07 7.79 7.84 10.24 7.84 8.77 %	8.63 %
[7]	Adjusted Dividend Yield (4)	2.14 % 2.14 2.53 2.00 2.16 2.24 1.74 1.89 Average	Average of Mean and Median
[9]	Average Projected Five Year Growth in EPS (3)	5.10 % 7.86 6.58 8.07 5.63 5.60 8.50 5.95	Average of M
[2]	Yahoo! Finance Projected Five Year Growth in	4.45 % 7.03 5.50 9.70 6.00 2.70 4.90	
[4]	Zack's Five Year Projected Growth Rate in EPS	5.00 % 7.40 6.30 5.50 6.00 NA NA	
[3]	Reuters Mean Consensus Projected Five Year Growth Rate in EPS	4.45 % 8.52 7.50 NA 6.00 NA NA	
[2]	Value Line Projected Five Year Growth in EPS (2)	6.50 % 8.50 7.00 9.00 4.50 8.50 3.00 7.00	
[1]	Average Dividend Yield (1)	2.09 % 2.06 2.45 1.92 2.10 2.18 1.67 1.84	
	Proxy Group of Eight Water Companies	American States Water Co. American Water Works Company Inc Aqua America Inc California Water Service Group Connecticut Water Service Inc Middlesex Water Co. SJW Corp York Water Co.	

NA= Not Available

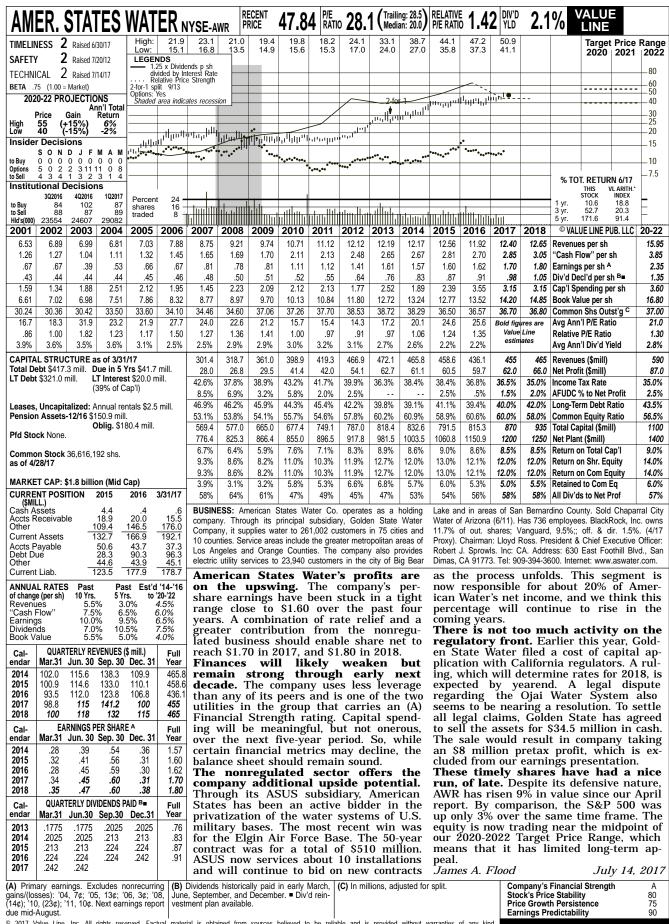
Notes:

 $(1) \ \ Indicated \ \ dividend \ at \ 08/31/2017 \ \ divided \ \ by \ the \ \ average \ \ dosing \ \ price \ \ of the \ \ last \ 60 \ \ trading \ \ days \ \ ending \ \ 08/31/2017 \ \ for \ \ dosing \ \ days \$ each company.

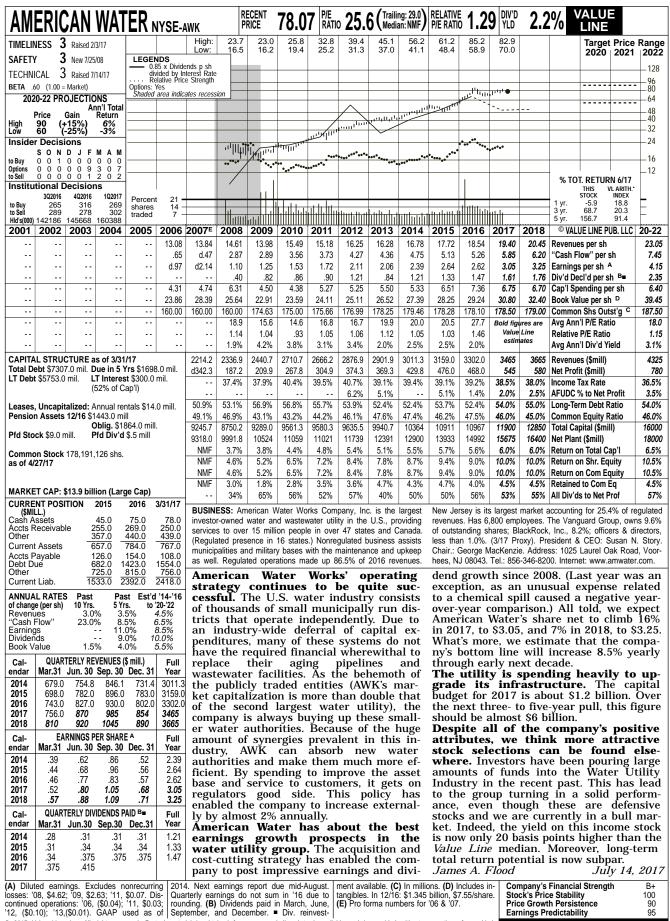
- (2) From pages 2 through 9 of this Sub-Schedule.
  (3) Average of columns 2 through 5 excluding negative growth rates.
  (4) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 6) x column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for American States Water Co., 2.09% x (1+(1/2 x 5.10%)) = 2.14%.
- (5) Column 6 + column 7.

Source of Information:

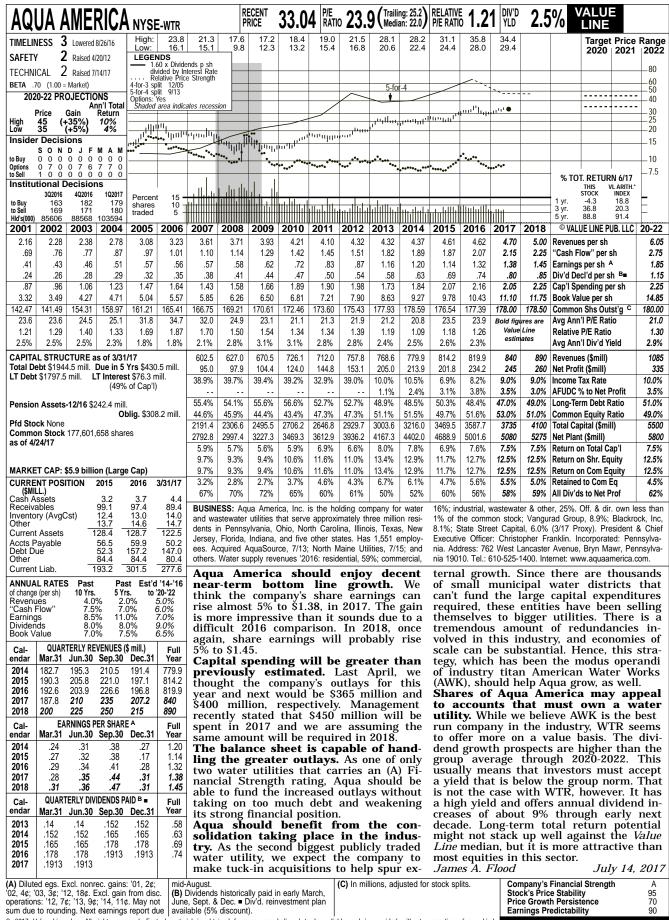
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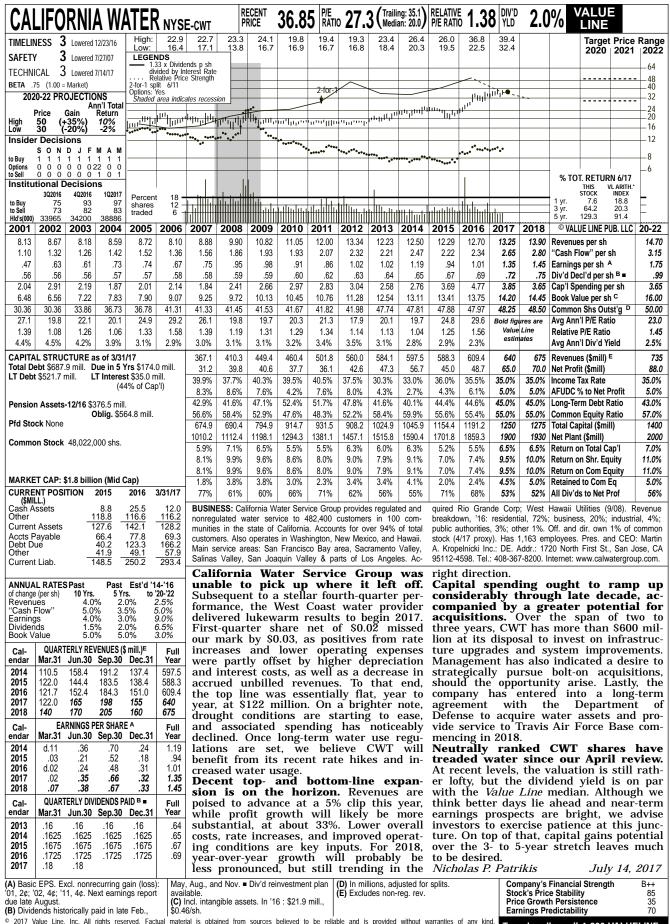
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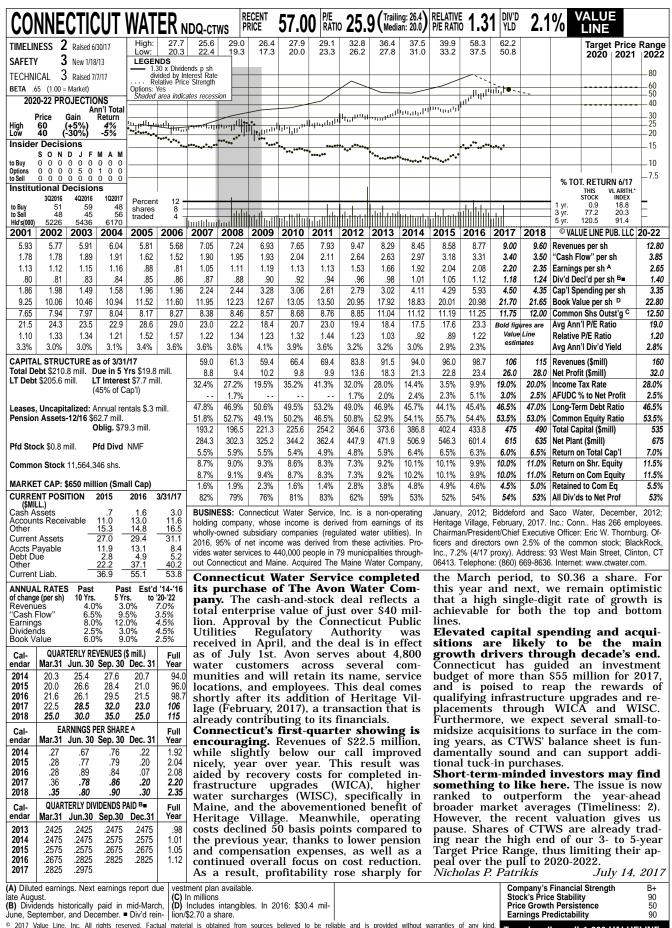
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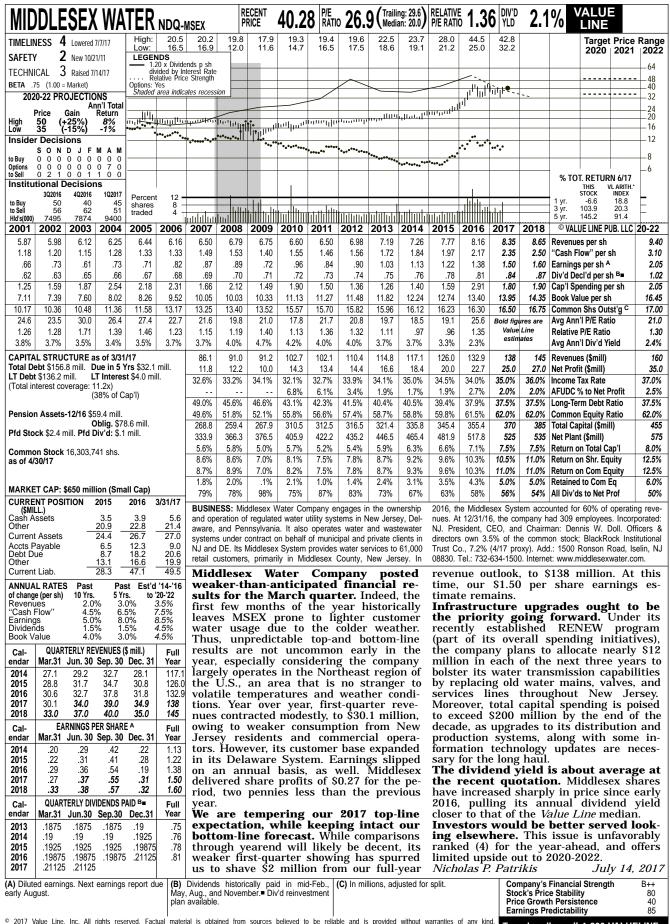


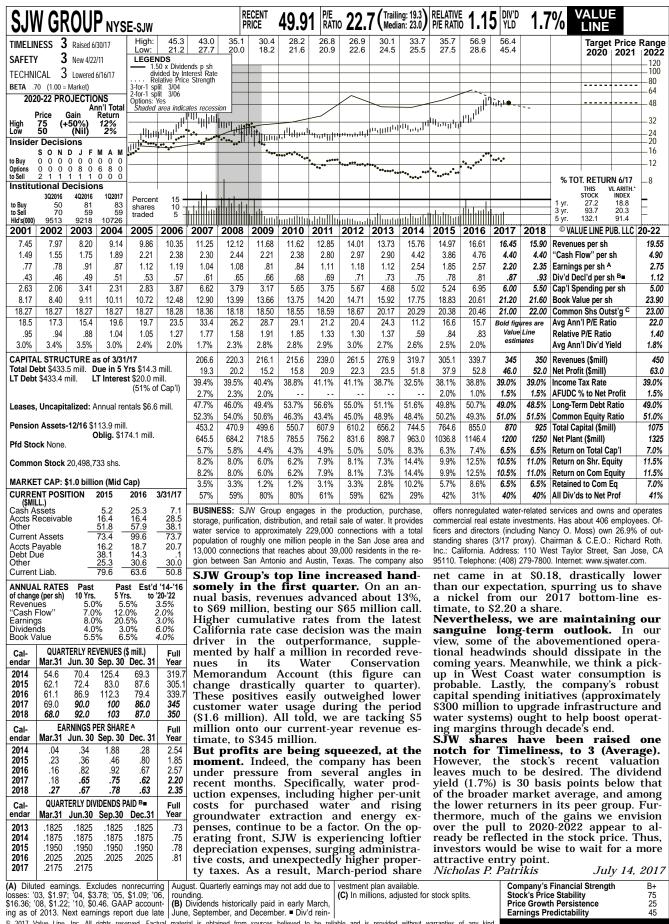
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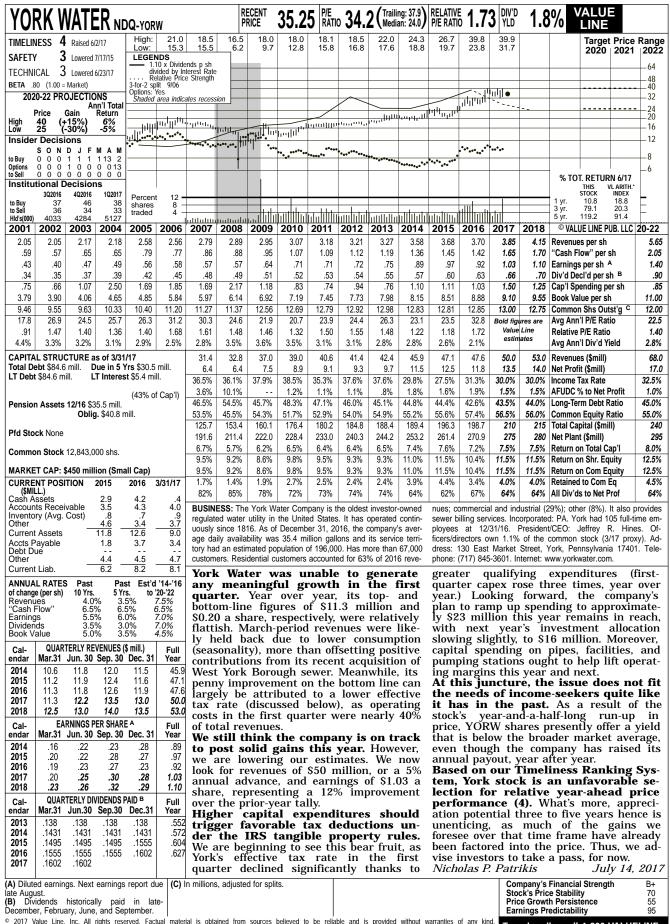
June, September, and December. ■ Div'd rein- lion/\$2.70 a share.

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## Indian Hills Utility Operating Company, Inc. Summary of Risk Premium Models for the Proxy Group of Eight Water Companies

		Proxy Group of Eight Water	•
		Companies	
Predictive Risk Premium Model			
(PRPM) (1)		11.81	%
Risk Premium Using an Adjusted Total			
Market Approach (2)		9.68	%
	Average	10.75	%

#### Notes:

- (1) From page 2 of this Sub-Schedule.
- (2) From page 3 of this Sub-Schedule.

## Derived by the Predictive Risk Premium Model (1) Indian Hills Utility Operating Company, Inc. Indicated ROE

[7]	Indicated ROE (4)	11.17% NMF	13.57% 10.73%	%09.6	12.62%	11.55%	15.18%	12.06%	11.55%	11.81%
[9]	Risk-Free Rate (3)	3.56% 3.56%	3.56%	3.56%	3.56%	3.56%	3.56%	Average	Median	an and Median
[5]	Predicted Risk Premium (2)	7.61% NMF	10.01% 7.17%	6.04%	%90.6	7.99%	11.62%			Average of Mean and Median
[4]	GARCH Coefficient	1.75220 5.62006	2.28087 1.93020	1.88384	2.01400	1.56705	2.09126			
[3]	Average Predicted Variance	0.35% NMF	0.35%	0.26%	0.36%	0.41%	0.44%			
[2]	Spot Predicted Variance	0.32% NMF	0.24% 0.29%	0.22%	0.43%	0.41%	0.42%			
[1]	LT Average Predicted Variance	0.39% NMF	0.45%	0.29%	0.29%	0.42%	0.47%			
	Proxy Group of Eight Water Companies	American States Water Co. American Water Works Company Inc	Aqua America Inc California Water Service Group	Connecticut Water Service Inc	Middlesex Water Co.	SJW Corp	York Water Co.			

NMF = Not Meaningful Figure

### Notes:

The Predictive Risk Premium Model uses historical data to generate a predicted variance and a GARCH coefficient. The historical data used are the equity risk premiums for the first available trading month as reported by Bloomberg Professional Service. (1)

- (1+(Column [3] \* Column [4])<sup>1,2</sup>) 1. From note 2 on page 2 of Sub-Schedule DWD-5. Column [5] + Column [6].
- (4)

## Indian Hills Utility Operating Company, Inc. Indicated Common Equity Cost Rate Through Use of a Risk Premium Model Using an Adjusted Total Market Approach

Line No.			Proxy Group of Eight Water Companies
1.		Prospective Yield on Aaa Rated Corporate Bonds (1)	4.57 %
2.		Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A Rated Public	
		Utility Bonds	0.26 (2)
3.		Adjusted Prospective Yield on A Rated Public Utility Bonds	4.83 %
4.		Adjustment to Reflect Bond Rating Difference of Proxy Group	0.06 (3)
5.		Adjusted Prospective Bond Yield	4.89 %
6.		Equity Risk Premium (4)	4.79
7.		Risk Premium Derived Common Equity Cost Rate	9.68 %
Notes:	(1)	Consensus forecast of Moody's Aaa Rated Corpor Chip Financial Forecasts (see pages 10-11 of this	
	(2)	The average yield spread of A rated public utility rated corporate bonds of 0.26% from page 4 of the	
	(3)	Adjustment to reflect the A2 / A3 Moody's LT issuproxy group of eight water companies as shown of Schedule. The 0.06% upward adjustment is derived the spread between A2 and A3 Public Utility Bond 0.06%) as derived from page 4 of this Sub-Schedule.	uer rating of the on page 5 of this Sub- yed by taking 1/6 of ds (1/6 * 0.37% =
	(4)	From page 7 of this Sub-Schedule.	

## Indian Hills Utility Operating Company, Inc. Interest Rates and Bond Spreads for Moody's Corporate and Public Utility Bonds

#### **Selected Bond Yields**

	Aaa Rated Corporate Bond	A Rated Public Utility Bond	Baa Rated Public Utility Bond
Aug-2017 Jul-2017	3.63 % 3.70	3.86 % 3.99	4.23 % 4.36
Jun-2017	3.68	3.94	4.32
Average	3.67 %	3.93 %	4.30 %

#### **Selected Bond Spreads**

A Rated Public Utility Bonds Over Aaa Ra	ated Corporate Bonds:
--	-----------------------

0.26 % (1)

Baa Rated Public Utility Bonds Over A Rated Public Utility Bonds:

0.37 % (2)

#### Notes:

- (1) Column [2] Column [1].
- (2) Column [3] Column [2].

Source of Information:

Bloomberg Professional Service

### Indian Hills Utility Operating Company, Inc. Comparison of Long-Term Issuer Ratings for Proxy Group of Eight Water Companies

Moody's	Standard & Poor's
Long-Term Issuer Rating	Long-Term Issuer Rating
August 2017	August 2017

Proxy Group of Eight Water Companies	Long-Term Issuer Rating	Numerical Weighting(1)	Long-Term Issuer Rating	Numerical Weighting(1)
American States Water Co. (2)	A2	6.0	A+	5.0
American Water Works Company Inc (3)	A3	7.0	Α	6.0
Aqua America Inc (4)	NR		A+	5.0
California Water Service Group (5)	NR		A+	5.0
Connecticut Water Service Inc (6)	NR		Α	6.0
Middlesex Water Co.	NR		Α	6.0
SJW Corp (7)	NR		Α	6.0
York Water Co.	NR		A-	7.0
Average	A2/A3	6.5	A	5.8

#### Notes:

- (1) From page 6 of this Sub-Schedule.
- (2) Ratings that of Golden State Water Company.
- (3) Ratings that of New Jersey and Pennsylvania American Water Companies.
- (4) Ratings that of Aqua Pennsylvania, Inc.
- (5) Ratings that of California Water Service Company.
- (6) Ratings that of Connecticut Water Company.
- (7) Ratings that of San Jose Water Company.

Source Information: Moody's Investors Service

Standard & Poor's Global Utilities Rating Service

### Numerical Assignment for Moody's and Standard & Poor's Bond Ratings

Moody's Bond Rating	Numerical Bond Weighting	Standard & Poor's Bond Rating
Aaa	1	AAA
Aa1	2	AA+
Aa2	3	AA
Aa3	4	AA-
A1	5	A+
A2	6	A
А3	7	A-
Baa1	8	BBB+
Baa2	9	BBB
Baa3	10	BBB-
Ba1	11	BB+
Ba2	12	ВВ
Ba3	13	BB-
B1	14	B+
В2	15	В
	16	В-
В3	10	D-

## Indian Hills Utility Operating Company, Inc. Judgment of Equity Risk Premium for Proxy Group of Eight Water Companies

Line No.	_	Proxy Group of Eight Water Companies
1.	Calculated equity risk premium based on the total market using	
	the beta approach (1)	5.60 %
2.	Mean equity risk premium based on a study using the holding period returns of public utilities	
	with A rated bonds (2)	3.98
3.	Average equity risk premium	4.79 %
Notes:	(1) From page 8 of this Sub-Schedule.	

(2) From page 12 of this Sub-Schedule.

## Indian Hills Utility Operating Company, Inc. Derivation of Equity Risk Premium Based on the Total Market Approach Using the Beta for the Proxy Group of Eight Water Companies

Line No.	Equity Risk Premium Measure	Proxy Group of Eight Water Companies
	<u>Ibbotson-Based Equity Risk Premiums:</u>	
1.	Ibbotson Equity Risk Premium (1)	5.56 %
2.	Regression on Ibbotson Risk Premium Data (2)	7.41
3.	Ibbotson Equity Risk Premium based on PRPM (3)	5.96
4.	Average Ibbotson Equity Risk Premium	6.31
	Value Line-Based Equity Risk Premiums:	
5.	Equity Risk Premium Based on Value Line Summary and Index (4)	5.07
6.	Equity Risk Premium Based on Value Line S&P 500 Companies (5)	9.56
7.	Average Value Line Equity Risk Premium	7.32
	Bloomberg-Based Equity Risk Premium:	
8.	Equity Risk Premium Based on Bloomberg S&P 500 Companies (6)	9.08
9.	Conclusion of Equity Risk Premium (7)	7.57 %
10.	Adjusted Beta (8)	0.74
11.	Forecasted Equity Risk Premium	5.60 %

Notes provided on page 9 of this Sub-Schedule.

## Indian Hills Utility Operating Company, Inc. Derivation of Equity Risk Premium Based on the Total Market Approach Using the Beta for the Proxy Group of Eight Water Companies

#### Notes:

- (1) Based on the arithmetic mean historical monthly returns on large company common stocks from Ibbotson® SBBI® 2017 Market Report minus the arithmetic mean monthly yield of Moody's average Aaa and Aa corporate bonds from 1926-2016.
- (2) This equity risk premium is based on a regression of the monthly equity risk premiums of large company common stocks relative to Moody's average Aaa and Aa rated corporate bond yields from 1928-2016 referenced in Note 1 above.
- (3) The Predictive Risk Premium Model (PRPM) is discussed in the accompanying direct testimony. The Ibbotson equity risk premium based on the PRPM is derived by applying the PRPM to the monthly risk premiums between Ibbotson large company common stock monthly returns and average Aaa and Aa corporate monthly bond yields, from January 1928 through August 2017.
- (4) The equity risk premium based on the Value Line Summary and Index is derived by subtracting the average consensus forecast of Aaa corporate bonds of 4.57% (from page 3 of this Sub-Schedule) from the projected 3-5 year total annual market return of 9.64% (described fully in note 1 on page 2 of Sub-Schedule DWD-5).
- (5) Using data from Value Line for the S&P 500, an expected total return of 14.13% was derived based upon expected dividend yields and long-term earnings growth estimates as a proxy for capital appreciation. Subtracting the average consensus forecast of Aaa corporate bonds of 4.57% results in an expected equity risk premium of 9.56%.
- (6) Using data from the Bloomberg Professional Service for the S&P 500, an expected total return of 13.65% was derived based upon expected dividend yields and long-term earnings growth estimates as a proxy for capital appreciation. Subtracting the average consensus forecast of Aaa corporate bonds of 4.57% results in an expected equity risk premium of 9.08%.
- (7) Average of lines 4, 7, and 8.
- (8) Average of mean and median beta from Sub-Schedule DWD-5.

#### Sources of Information:

Stocks, Bonds, Bills, and Inflation -  $\,2017\,$  SBBI Yearbook, John Wiley & Sons, Inc. Industrial Manual and Mergent Bond Record Monthly Update.

Value Line Summary and Index

Blue Chip Financial Forecasts, June 1, 2017 and September 1, 2017

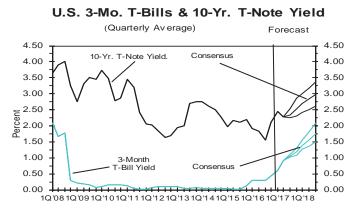
**Bloomberg Professional Services** 

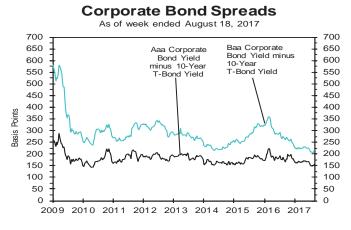
#### Consensus Forecasts Of U.S. Interest Rates And Key Assumptions<sup>1</sup>

	History				Cons	ensus l	Forecas	sts-Qua	arterly	Avg.				
	Av	erage For	Week End	ling	Ave	erage For	Month	Latest Qtr	3Q	4Q	1Q	2Q	3Q	4Q
Interest Rates	<u>Aug 18</u>	<u>Aug 11</u>	Aug 4	<u>Jul 28</u>	<u>Jul</u>	<u>Jun</u>	<u>May</u>	2Q 2017	<u>2017</u>	<u>2017</u>	<u>2018</u>	<u>2018</u>	<u>2018</u>	<u>2018</u>
Federal Funds Rate	1.16	1.16	1.15	1.16	1.15	1.03	0.90	0.94	1.15	1.25	1.46	1.63	1.84	2.03
Prime Rate	4.25	4.25	4.25	4.25	4.25	4.13	4.00	4.04	4.25	4.34	4.53	4.70	4.90	5.09
LIBOR, 3-mo.	1.32	1.31	1.31	1.31	1.31	1.26	1.18	1.20	1.33	1.47	1.68	1.86	2.06	2.27
Commercial Paper, 1-mo.	1.09	1.11	1.10	1.11	1.10	1.00	0.84	0.89	1.15	1.27	1.48	1.67	1.89	2.11
Treasury bill, 3-mo.	1.02	1.04	1.08	1.13	1.09	1.00	0.90	0.90	1.06	1.18	1.38	1.56	1.76	1.95
Treasury bill, 6-mo.	1.13	1.15	1.14	1.13	1.13	1.11	1.03	1.03	1.15	1.30	1.51	1.68	1.90	2.09
Treasury bill, 1 yr.	1.24	1.22	1.23	1.23	1.23	1.20	1.12	1.12	1.26	1.44	1.65	1.83	2.03	2.20
Treasury note, 2 yr.	1.33	1.34	1.35	1.37	1.38	1.33	1.31	1.29	1.41	1.60	1.79	1.96	2.16	2.31
Treasury note, 5 yr.	1.78	1.80	1.81	1.85	1.88	1.77	1.85	1.82	1.90	2.09	2.26	2.40	2.57	2.70
Treasury note, 10 yr.	2.22	2.24	2.27	2.30	2.32	2.19	2.31	2.27	2.34	2.52	2.69	2.83	2.98	3.08
Treasury note, 30 yr.	2.80	2.82	2.85	2.89	2.89	2.81	2.97	2.91	2.91	3.06	3.24	3.36	3.50	3.59
Corporate Aaa bond	3.77	3.77	3.77	3.79	3.81	3.81	3.99	3.93	3.81	4.00	4.22	4.41	4.57	4.66
Corporate Baa bond	4.36	4.35	4.34	4.36	4.39	4.39	4.57	4.52	4.49	4.70	4.93	5.12	5.29	5.44
State & Local bonds	3.33	3.35	3.39	3.38	3.43	3.37	3.51	3.48	3.51	3.69	3.92	4.08	4.22	4.34
Home mortgage rate	3.89	3.90	3.93	3.92	3.97	3.90	4.01	3.99	3.99	4.14	4.34	4.48	4.64	4.77
	Histor		Histor	Y			Co	onsensı	ıs Fore	casts-(	<b>Quarte</b> i	rly		
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Key Assumptions	2015	2015	2016	2016	2016	2016	2017	2017	2017	2017	2018	2018	2018	2018
Major Currency Index	91.8	93.1	93.3	89.6	90.3	93.7	94.4	93.0	89.6	89.5	89.7	89.8	89.8	89.8
Real GDP	1.6	0.5	0.6	2.2	2.8	1.8	1.2	2.6	2.7	2.4	2.3	2.4	2.3	2.2
GDP Price Index	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0	1.7	2.0	2.1	2.0	2.1	2.1
Consumer Price Index	1.5	0.4	0.1	2.3	1.8	3.0	3.1	-0.3	1.5	2.2	2.2	2.1	2.2	2.4

Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index and Consumer Price Index are seasonally-adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data: Treasury rates from the Federal Reserve Board's H.15; AAA-AA and A-BBB corporate bond yields from Bank of America-Merrill Lynch and are 15+ years, yield to maturity; State and local bond yields from Bank of America-Merrill Lynch, A-rated, yield to maturity; Mortgage rates from Freddie Mac, 30-year, fixed; LIBOR quotes from Intercontinental Exchange. All interest rate data is sourced from Haver Analytics. Historical data for Fed's Major Currency Index is from FRSR H.10. Historical data for Real GDP and GDP Chained Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index (CPI) history is from the Department of Labor's Bureau of Labor Statistics (BLS).

#### U.S. Treasury Yield Curve Week ended August 18, 2017 and Year Ago vs. 3Q 2017 and 4Q 2018 Consensus Forecasts 4.00 4.50 Year Ago 4.00 3.50 Week ended 8/18/2017 3.50 3.00 Consensus 4Q 2018 3.00 2.50 2.50 Percent 2.00 2.00 1.50 1.50 1.00 1.00 0.50 0.50 0.00 6mo 1yr 2yr 5yr 10yr 30yr 3mo Maturities







#### **Long-Range Survey:**

The table below contains the results of our twice-annual long-range CONSENSUS survey. There are also Top 10 and Bottom 10 averages for each variable. Shown are consensus estimates for the years 2019 through 2023 and averages for the five-year periods 2019-2023 and 2024-2028. Apply these projections cautiously. Few if any economic, demographic and political forces can be evaluated accurately over such long time spans.

		Average For The Year					Five-Year Averages		
Interest Rates		2019	2020	2021	2022	2023	2019-2023	2024-2028	
1. Federal Funds Rate	CONSENSUS	2.6	2.9	2.9	2.9	2.9	2.8	3.0	
	Top 10 Average	3.1	3.5	3.4	3.5	3.5	3.4	3.5	
	Bottom 10 Average	2.0	2.3	2.3	2.3	2.4	2.3	2.4	
2. Prime Rate	CONSENSUS	5.6	5.9	5.9	5.9	5.9	5.8	6.0	
	Top 10 Average	6.1	6.5	6.5	6.5	6.5	6.4	6.5	
	Bottom 10 Average	5.0	5.3	5.3	5.2	5.3	5.2	5.4	
3. LIBOR, 3-Mo.	CONSENSUS	2.9	3.1	3.2	3.1	3.2	3.1	3.2	
	Top 10 Average	3.4	3.7	3.7	3.7	3.8	3.7	3.8	
	Bottom 10 Average	2.4	2.6	2.6	2.5	2.6	2.5	2.6	
4. Commercial Paper, 1-Mo.	CONSENSUS	2.7	3.0	3.0	3.0	3.1	3.0	3.1	
	Top 10 Average	3.2	3.5	3.5	3.6	3.6	3.5	3.6	
	Bottom 10 Average	2.2	2.5	2.5	2.4	2.5	2.4	2.6	
5. Treasury Bill Yield, 3-Mo.	CONSENSUS	2.5	2.8	2.8	2.8	2.9	2.8	2.9	
	Top 10 Average	3.1	3.4	3.4	3.4	3.5	3.3	3.5	
	Bottom 10 Average	1.9	2.2	2.3	2.2	2.3	2.2	2.3	
6. Treasury Bill Yield, 6-Mo.	CONSENSUS	2.6	2.9	3.0	3.0	3.0	2.9	3.0	
	Top 10 Average	3.2	3.6	3.5	3.6	3.6	3.5	3.6	
	Bottom 10 Average	2.0	2.4	2.4	2.4	2.4	2.3	2.4	
7. Treasury Bill Yield, 1-Yr.	CONSENSUS	2.8	3.1	3.1	3.1	3.1	3.0	3.2	
	Top 10 Average	3.4	3.7	3.7	3.7	3.7	3.6	3.7	
	Bottom 10 Average	2.1	2.5	2.5	2.5	2.5	2.4	2.5	
8. Treasury Note Yield, 2-Yr.	CONSENSUS	2.9	3.2	3.3	3.3	3.3	3.2	3.3	
	Top 10 Average	3.5	3.9	3.9	3.9	3.9	3.8	4.0	
	Bottom 10 Average	2.3	2.6	2.7	2.6	2.6	2.6	2.7	
10. Treasury Note Yield, 5-Yr.	CONSENSUS	3.3	3.5	3.5	3.6	3.6	3.5	3.6	
	Top 10 Average	3.9	4.2	4.2	4.2	4.2	4.1	4.3	
	Bottom 10 Average	2.7	2.9	2.9	3.0	3.0	2.9	3.0	
11. Treasury Note Yield, 10-Yr.	CONSENSUS	3.6	3.8	3.8	3.9	3.9	3.8	3.9	
	Top 10 Average	4.2	4.5	4.4	4.5	4.5	4.4	4.6	
	Bottom 10 Average	2.9	3.1	3.1	3.2	3.3	3.1	3.3	
12. Treasury Bond Yield, 30-Yr.	CONSENSUS	4.2	4.3	4.4	4.4	4.4	4.3	4.5	
	Top 10 Average	4.9	5.0	5.0	5.0	5.0	5.0	5.1	
	Bottom 10 Average	3.5	3.7	3.7	3.8	3.8	3.7	3.8	
13. Corporate Aaa Bond Yield	CONSENSUS	5.2	5.4	5.4	5.4	5.5	5.4	5.5	
	Top 10 Average	5.7	5.9	5.9	6.0	5.9	5.9	6.0	
	Bottom 10 Average	4.7	4.9	4.9	4.9	5.0	4.9	5.1	
13. Corporate Baa Bond Yield	CONSENSUS	6.1	6.3	6.3	6.3	6.3	6.3	6.4	
	Top 10 Average	6.8	7.0	6.9	7.0	6.9	6.9	7.0	
44.0	Bottom 10 Average	5.5	5.6	5.7	5.6	5.8	5.6	5.7	
14. State & Local Bonds Yield	CONSENSUS	4.6	4.7	4.7	4.7	4.7	4.7	4.8	
	Top 10 Average	5.1	5.3	5.2	5.3	5.3	5.2	5.3	
15 Home Mortones Date	Bottom 10 Average	<u>4.2</u> <b>5.3</b>	4.2 5.5	4.2 5.5	4.1 5.5	4.1 5.5	4.2 <b>5.4</b>	4.2	
15. Home Mortgage Rate	CONSENSUS	5.9						5.6	
	Top 10 Average Bottom 10 Average		6.2	6.1	6.2 4.7	6.1 4.9	6.1 4.8	6.2 4.9	
A. FRB - Major Currency Index	CONSENSUS	93.8	93.2	93.1	93.0	92.7	93.2	92.5	
A.1 RB - Wajor Currency much	Top 10 Average	96.5	96.6	96.9	97.1	97.2	96.9	97.1	
	Bottom 10 Average	91.0	89.7	89.2	88.7	88.1	89.3	88.1	
	Bottom to Average								
		2010		ver-Year, %		Averages			
D. Deel CDD	CONTRIBUTOR	2019	2020	2021	2022	2023	2019-2023	2024-2028	
B. Real GDP	CONSENSUS	2.2	2.0	2.0	2.0	2.0	2.0	2.1	
	Top 10 Average	2.6	2.4	2.4	2.4	2.3	2.4	2.3	
C CDR Chained Briss Is don	Bottom 10 Average CONSENSUS	1.7 2.2	1.6	1.6	1.6	1.6	1.6 2.1	1.8 2.0	
C. GDP Chained Price Index			2.1	2.1	2.0	2.0			
	Top 10 Average	2.5	2.3	2.3	2.2	2.2	2.3	2.3	
D. Consumer Price Index	Bottom 10 Average CONSENSUS	1.9 2.3	1.9 2.3	1.9 2.3	1.9 2.3	1.7 2.2	1.8 2.2	1.9 2.2	
D. Consumer thee muex	Top 10 Average	2.6	2.6	2.5	2.5	2.4	2.5	2.4	
	Bottom 10 Average	2.6 1.9	2.0	2.0	2.3	1.8	2.0	2.4	
	Bottom to Average	1.7	۷.0	۷.0	2.1	1.0	۷.0	2.0	

### Indian Hills Utility Operating Company, Inc. Derivation of Mean Equity Risk Premium Based Studies Using Holding Period Returns and Projected Market Appreciation of the S&P Utility Index

<u>Line No.</u>		Implied Equity Risk Premium
	Equity Risk Premium based on S&P Utility Index Holding Period Returns (1):	
1.	Historical Equity Risk Premium	3.96 %
2.	Regression of Historical Equity Risk Premium (2)	5.62
3.	Forecasted Equity Risk Premium Based on PRPM (3)	4.03
4.	Average Equity Risk Premium Using S&P Holding Period Returns	4.53 %
	Equity Risk Premium based on Projected Market Appreciation of the S&P Utility Index	
5.	Forecasted Equity Risk Premium based on Projected Total Return on the S&P Utilities Index (Value Line Data) (4)	4.15
6.	Forecasted Equity Risk Premium based on Projected Total Return on the S&P Utilities Index (Bloomberg Data) (5)	3.27
7.	Average Equity Risk Premium (6)	3.98 %

- Notes: (1) Based on S&P Public Utility Index monthly total returns and Moody's Public Utility
  Bond average monthly yields from 1928-2016. Holding period returns are
  calculated based upon income received (dividends and interest) plus the relative
  change in the market value of a security over a one-year holding period.
  - (2) This equity risk premium is based on a regression of the monthly equity risk premiums of the S&P Utility Index relative to Moody's A rated public utility bond yields from 1928 2016 referenced in note 1 above.
  - (3) The Predictive Risk Premium Model (PRPM) is applied to the risk premium of the monthly total returns of the S&P Utility Index and the monthly yields on Moody's A rated public utility bonds from January 1928 - August 2017.
  - (4) Using data from Value Line for the S&P Utilities Index, an expected return of 8.98% was derived based on expected dividend yields and long-term growth estimates as a proxy for market appreciation. Subtracting the expected A rated public utility bond yield of 4.83%, calculated on line 3 of page 3 of this Sub-Schedule results in an equity risk premium of 4.15%. (8.98% 4.83% = 4.15%)
  - (5) Using data from Bloomberg Professional Service for the S&P Utilities Index, an expected return of 8.10% was derived based on expected dividend yields and long-term growth estimates as a proxy for market appreciation. Subtracting the expected A rated public utility bond yield of 4.83%, calculated on line 3 of page 3 of this Sub-Schedule results in an equity risk premium of 3.27%. (8.10% 4.83% = 3.27%)
  - (6) Average of Lines 4 through 6.

Indian Hills Utility Operating Company, Inc. Indicated Common Equity Cost Rate Through Use the Traditional Canital Asset Pricing Model (CAPM) and Emnitical Canital Asset Pricing Model (EC

	[8]	Indicated Common Equity Cost Rate (3)	10.13 %	9.60	10.28	9.75	11.03	10.43	11.41	10.21 %	10.21 %	10.21 %
	[7]	ECAPM Cost Rate	10.42 %	9.97	10.55	10.10	11.19	10.68	11.52	10.49 %	10.48 %	10.49
Model (ECAPM)	[9]	Traditional CAPM Cost Rate	9.84 %	9.24	10.01	9.41	10.87	10.18	11.30	9.94 %	9.92 %	9.93
Indicated Common Equity Cost Rate Through Use Asset Pricing Model (CAPM) and Empirical Capital Asset Pricing Model (ECAPM)	[2]	Risk-Free Rate (2)	3.56 %	3.56	3.56	3.56	3.56	3.56	3.56			
Indicated Common Equity Cost Kate Through Use iset Pricing Model (CAPM) and Empirical Capital A	[4]	Market Risk Premium (1)	8.60 %	8.60	8.60	8.60	8.60	8.60	8.60			
nmon Equity ( odel (CAPM) a	[3]	Average Beta	0.73	99.0	0.75	0.68	0.85	0.77	06.0	0.74	0.74	0.74
	[2]	Bloomberg Adjusted Beta	0.71	0.62	0.75	0.70	0.94	0.84	1.00			
of the Traditional Capital	[1]	Value Line Adjusted Beta	0.75	0.70	0.75	0.65	0.75	0.70	0.80			
of the T <sub>1</sub>		Proxy Group of Eight Water Companies	American States Water Co.	Aqua America Inc	California Water Service Group	Connecticut Water Service Inc	Middlesex Water Co.	SJW Corp	York Water Co.	Mean	Median	Average of Mean and Median

Notes on page 2 of this Sub-Schedule.

#### Indian Hills Utility Operating Company, Inc. Notes to Accompany the Application of the CAPM and ECAPM

#### Notes:

(1) The market risk premium (MRP) is derived by using six different measures from three sources: Ibbotson, Value Line, and Bloomberg as illustrated below:

#### **Historical Data MRP Estimates:**

Measure 1: Ibbotson Arithmetic Mean MRP	(1926-2016)

Measure 1: IDDOUSON Arithmetic Mean MRP (1920-2016)	
Arithmetic Mean Monthly Returns for Large Stocks 1926-2016: Arithmetic Mean Income Returns on Long-Term Government Bonds: MRP based on Ibbotson Historical Data:	11.97 % 5.17 6.80 %
Measure 2: Application of a Regression Analysis to Ibbotson Historical Data (1926-2016)	8.62 %
Measure 3: Application of the PRPM to Ibbotson Historical Data: (January 1926 - August 2017)	6.75 %
Average Historical Data MRP	7.39 %
Value Line MRP Estimates:	
Measure 4: Value Line Projected MRP (Thirteen weeks ending September 01, 2017)	
Total projected return on the market 3-5 years hence*: Projected Risk-Free Rate (see note 2): MRP based on Value Line Summary & Index: *Forcasted 3-5 year capital appreciation plus expected dividend yield	9.64 % 3.56 6.08 %
Measure 5: Value Line Projected Return on the Market based on the S&P 500	
Total return on the Market based on the S&P 500: Projected Risk-Free Rate (see note 2): MRP based on Value Line data	14.13 % 3.56 10.57 %
Average Value Line MRP:	8.33 %
Measure 6: Bloomberg Projected MRP	
Total return on the Market based on the S&P 500: Projected Risk-Free Rate (see note 2):  MRP based on Bloomberg data	13.65 % 3.56 10.09 %
Average of Value Line, Ibbotson, and Bloomberg MRP:	8.60 %

(2) For reasons explained in the direct testimony, the appropriate risk-free rate for cost of capital purposes is the average forecast of 30 year Treasury Bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts. (See pages 10-11 of Sub-Schedule DWD-4.) The projection of the risk-free rate is illustrated below:

Third Quarter 2017	2.91 %
Fourth Quarter 2017	3.06
First Quarter 2018	3.24
Second Quarter 2018	3.36
Third Quarter 2018	3.50
Fourth Quarter 2018	3.59
2019-2023	4.30
2024-2028	4.50
	3.56 %

(3) Average of Column 6 and Column 7.

#### Sources of Information:

Value Line Summary and Index Blue Chip Financial Forecasts, June 1, 2017 and September 1, 2017 Stocks, Bonds, Bills, and Inflation - 2017 SBBI Yearbook, John Wiley & Sons, Inc. Bloomberg Professional Services

### Indian Hills Operating Company, Inc. Basis of Selection of the Group of Non-Price Regulated Companies Comparable in Total Risk to the Utility Proxy Group

The criteria for selection of the proxy group of seventeen non-price regulated companies was that the non-price regulated companies be domestic and reported in <u>Value Line Investment Survey</u> (Standard Edition).

The proxy group of seventeen non-price regulated companies were then selected based on the unadjusted beta range of 0.34 - 0.70 and residual standard error of the regression range of 2.3533 - 2.8069 of the water proxy group.

These ranges are based upon plus or minus two standard deviations of the unadjusted beta and standard error of the regression. Plus or minus two standard deviations captures 95.50% of the distribution of unadjusted betas and residual standard errors of the regression.

The standard deviation of the water industry's residual standard error of the regression is 0.1134. The standard deviation of the standard error of the regression is calculated as follows:

Standard Deviation of the Std. Err. of the Regr. = Standard Error of the Regression 
$$\sqrt{2N}$$

where: N = number of observations. Since Value Line betas are derived from weekly price change observations over a period of five years, N = 259

Thus, 
$$0.1134 = \frac{2.5801}{\sqrt{518}} = \frac{2.5801}{22.7596}$$

Source of Information: Value Line, Inc., June 2017

Value Line Investment Survey (Standard Edition)

### Indian Hills Utility Operating Company, Inc. Basis of Selection of Comparable Risk Domestic Non-Price Regulated Companies

	[1]	[2]	[3]	[4]
Proxy Group of Eight Water Companies	Value Line Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta
American States Water Co.	0.75	0.58	2.7924	0.0973
American Water Works Company Inc	0.60	0.39	1.9839	0.0691
Aqua America Inc	0.70	0.47	2.2248	0.0775
California Water Service Group	0.75	0.56	2.5374	0.0884
Connecticut Water Service Inc	0.65	0.41	2.3746	0.0827
Middlesex Water Co.	0.75	0.57	2.8058	0.0978
SJW Corp	0.70	0.53	2.9297	0.1021
York Water Co.	0.80	0.62	2.9920	0.1042
Average	0.71	0.52	2.5801	0.0899
Beta Range (+/- 2 std. Devs. of Beta) 2 std. Devs. of Beta	0.34 0.18	0.70		
Residual Std. Err. Range (+/- 2 std.				
Devs. of the Residual Std. Err.)	2.3533	2.8069		
Std. dev. of the Res. Std. Err.	0.1134			
2 std. devs. of the Res. Std. Err.	0.2268			

Source of Information: Valueline Proprietary Database, June 2017

## Indian Hills Utility Operating Company, Inc. Proxy Group of Non-Price Regulated Companies Comparable in Total Risk to the Proxy Group of Eight Water Companies

[1] [2] [3] [4]

Proxy Group of Seventeen Non-Price Regulated Companies	VL Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta
ABM Industries Inc.	0.80	0.65	2.4419	0.0851
Bright Horizons Fami	0.85	0.70	2.4641	0.0949
Cheesecake Factory	0.85	0.70	2.5709	0.0896
CBOE Holdings	0.70	0.50	2.5345	0.0883
Chemed Corp.	0.85	0.70	2.8000	0.0976
CME Group	0.75	0.60	2.4401	0.0850
Forrester Research	0.70	0.53	2.7803	0.0969
Genpact Limited	0.75	0.57	2.7009	0.0941
Hormel Foods	0.75	0.58	2.4245	0.0845
Intercontinental Exc	0.80	0.63	2.3619	0.0823
Lancaster Colony	0.80	0.65	2.3708	0.0826
Lilly (Eli)	0.75	0.60	2.5343	0.0883
Mercury General	0.70	0.53	2.5576	0.0891
O'Reilly Automotive	0.80	0.69	2.6083	0.0909
Pinnacle Foods	0.80	0.67	2.5855	0.1007
Target Corp.	0.80	0.67	2.5354	0.0883
WD-40 Co.	0.80	0.64	2.4838	0.0865
Average	0.78	0.62	2.5400	0.0900
Droyn Croup of Fight Water				
Proxy Group of Eight Water Companies	0.71	0.52	2.5801	0.0899
Companies	0.71	0.32	2.3001	0.0077

Source of Information:

Valueline Proprietary Database, June 2017

# Indian Hills Utility Operating Company, Inc. Summary of Cost of Equity Models Applied to Proxy Group of Seventeen Non-Price Regulated Companies Comparable in Total Risk to the Proxy Group of Eight Water Companies

Principal Methods		Proxy Group Seventeen No Price Regulate Companies	n-
Discounted Cash Flow Model (DCF) (1)		12.73	%
Risk Premium Model (RPM) (2)		11.18	
Capital Asset Pricing Model (CAPM) (3)		10.79	_
	Mean	11.57	_%
	Median	11.18	_%
	Average of Mean and Median	11.38	_%

#### Notes:

- (1) From page 2 of this Sub-Schedule.
- (2) From page 3 of this Sub-Schedule.
- (3) From page 6 of this Sub-Schedule.

Indian Hills Utility Operating Company. Inc.

DCF Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Eight Water Companies

[8]	Indicated Common Equity Cost Rate (1)	11.46 %  NA 12.85 17.10 12.34 11.45 11.45 13.51 12.21 9.01 13.78 6.83 13.71 28.33 NA 12.72 9.26	12.23 13.12 % 12.34 % 12.73 %
[2]	Adjusted Dividend Yield	1.66 % 1.87 1.87 1.24 0.59 2.22 2.01 0.90 2.09 1.30 1.83 2.68 4.95	1.90 Mean Median n and Median
[9]	Average Projected Five Year Growth Rate in EPS	9.80 % 18.90 10.98 15.86 11.75 9.23 11.50 11.31 6.92 12.48 5.00 11.03 23.38 13.77 10.45 4.60	10.33 1.90  Mean  Median  Average of Mean and Median
[5]	Yahoo! Finance Projected Five Year Growth in EPS	5.10 % NA 10.55 18.28 NA 8.90 17.00 11.12 3.95 13.45 3.00 11.25 26.50 14.14 11.03 (3.33)	13.00
[4]	Zack's Five Year Projected Growth Rate in EPS	NA % 20.00 14.30 16.80 10.00 10.00 10.00 10.00 11.00 11.00 2.30 11.380 9.30 4.70 4.70	10.00
[3]	Reuters Mean Consensus Projected Five Year Growth Rate in EPS	NA % 17.19 10.55 NA NA 8.90 11.20 11.12 3.94 13.45 NA 11.25 26.50 14.14 11.03	NA
[2]	Value Line Projected Five Year Growth in EPS	14.50 % 19.50 8.50 12.50 13.50 13.00 10.50 12.00 7.00 11.00 14.00 13.00 NA 4.50	8.00
[1]	Average Dividend Yield	1.58 % 1.77 1.15 1.15 0.56 0.56 2.12 1.90 0.85 2.02 1.22 1.22 1.22 1.79 2.54 4.43	1.81
	Proxy Group of Seventeen Non-Price Regulated Companies	ABM Industries Inc. Bright Horizons Fami Cheesecake Factory CBOE Holdings Chemed Corp. CME Group Forrester Research Genpact Limited Hormel Foods Intercontinental Exc Lancaster Colony Lilly (Eli) Mercury General O'Reilly Automotive Pinnacle Foods Target Corp.	WD-40 Co.

NA= Not Available NMF= Not Meaningful Figure (1) The application of the DCF model to the domestic, non-price regluated comparable risk companies is identical to the application of the DCF to the utility proxy group. The dividend yield is derived by using the 60 day average price and the spot indicated dividend as of August 31, 2017. The dividend yield is then adjusted by 1/2 the average projected growth rate in EPS, which is calculated by averaging the 5 year projected growth in EPS provided by Value Line, www.reuters.com, www.zacks.com, and www.yahoo.com (excluding any negative growth rates) and then adding that growth rate to the adjusted dividend yield.

Source of Information:

Value Line Investment Survey: www.reuters.com Downloaded on 08/31/2017 www.zacks.com Downloaded on 08/31/2017 www.yahoo.com Downloaded on 08/31/2017

### Indian Hills Utility Operating Company, Inc. Indicated Common Equity Cost Rate Through Use of a Risk Premium Model Using an Adjusted Total Market Approach

Line No.		Proxy Group of Seventeen Non- Price Regulated Companies
1.	Prospective Yield on Baa Rated Corporate Bonds (1)	5.33 %
	Adjustment to Reflect Bond rating	
2.	Difference of Non-Price Regulated Companies (2)	(0.36)
3.	Adjusted Prospective Bond Yield	4.97
4.	Equity Risk Premium (3)	6.21
5.	Risk Premium Derived Common Equity Cost Rate	11.18 %

Notes: (1) Average forecast of Baa corporate bonds based upon the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated June 1, 2017 and September 1, 2017 (see pages 10 and 11 of Sub-Schedule DWD-4). The estimates are detailed below.

Third Quarter 2017	4.49	%
Fourth Quarter 2017	4.70	
First Quarter 2018	4.93	
Second Quarter 2018	5.12	
Third Quarter 2018	5.29	
Fourth Quarter 2018	5.44	
2019-2023	6.30	
2024-2028	6.40	_
Average	5.33	%

(2) The average yield spread of Baa rated corporate bonds over A corporate bonds for the three months ending August 2017 . To reflect the A2/A3 average rating of the non-utility proxy group, the prosepctive yield on Baa corporate bonds must be adjusted by 5/6 of the spread between A and Baa corporate bond yields as shown below:

	A Corp.		Baa Corp.			
	<b>Bond Yield</b>		Bond Yield		Spread	
Aug-2017	3.88	%	4.31	%	0.43	%
Jul-2017	3.98		4.39		0.41	
Jun-2017	3.93		4.37		0.44	
	Aver	age y	yield spread		0.43	%
		5,	/6 of spread		0.36	%

(3) From page 5 of this Sub-Schedule.

## Indian Hills Utility Operating Company, Inc. Comparison of Long-Term Issuer Ratings for the Proxy Group of Seventeen Non-Price Regulated Companies of Comparable risk to the Proxy Group of Eight Water Companies

	Moody's Long-Term Issuer Rating August 2017		Long-Tern	rd & Poor's n Issuer Rating ust 2017
Proxy Group of Seventeen Non- Price Regulated Companies	Long- Term Issuer Rating	Numerical Weighting (1)	Long- Term Issuer Rating	Numerical Weighting (1)
ABM Industries Inc.	NR		NR	
Bright Horizons Fami	NR		NR	
Cheesecake Factory	NR		NR	
CBOE Holdings	Baa1	8.0	BBB+	8.0
Chemed Corp.	WR		NR	
CME Group	Aa3	4.0	AA-	4.0
Forrester Research	NR		NR	
Genpact Limited	NR		BBB-	10.0
Hormel Foods	A1	5.0	A	6.0
Intercontinental Exc	A2	6.0	A	6.0
Lancaster Colony	NR		NR	
Lilly (Eli)	A2	6.0	AA-	4.0
Mercury General	Baa2	9.0	NR	
O'Reilly Automotive	Baa1	8.0	BBB+	8.0
Pinnacle Foods	NR		BB-	13.0
Target Corp.	A2	6.0	A	6.0
WD-40 Co.	NR		<u>NR</u>	
Average	A2/A3	6.5	<u>A-</u>	7.2

Notes:

(1) From page 6 of Sub-Schedule DWD-4.

Source of Information:

**Bloomberg Professional Services** 

#### Indian Hills Utility Operating Company, Inc.

#### Derivation of Equity Risk Premium Based on the Total Market Approach Using the Beta for

#### Proxy Group of Seventeen Non-Price Regulated Companies of Comparable risk to the <u>Proxy Group of Eight Water Companies</u>

Line No.		Equity Risk Premium Measure	Proxy Group of Seventeen Non- Price Regulated Companies	
	<u>Ibbo</u>	otson-Based Equity Risk Premiums:		
1.		Ibbotson Equity Risk Premium (1)	5.56	%
				,,
2.		Regression on Ibbotson Risk Premium Data (2)	7.41	
3.		Ibbotson Equity Risk Premium based on PRPM (3)	5.96	
4.		Average Ibbotson Equity Risk Premium	6.31	
	<u>Valu</u>	e Line-Based Equity Risk Premiums:		
5.		Equity Risk Premium Based on <u>Value Line</u> Summary and Index (4)	5.07	
6.		Equity Risk Premium Based on <u>Value Line</u> S&P 500 Companies (5)	9.56	
7.		Average <u>Value Line</u> Equity Risk Premium	7.32	
	Bloc	omberg-Based Equity Risk Premium:		
8.		Equity Risk Premium Based on Bloomberg S&P 500 Companies (6)	9.08	
9.		Conclusion of Equity Risk Premium (7)	7.57	%
10.		Adjusted Beta (8)	0.82	
11.		Forecasted Equity Risk Premium	6.21	%
Notes:				
	(1)	From note 1 of page 9 of Sub-Schedule DWD-4.		
	(2)	From note 2 of page 9 of Sub-Schedule DWD-4.		
	(3)	From note 3 of page 9 of Sub-Schedule DWD-4.		
	(4)	From note 4 of page 9 of Sub-Schedule DWD-4.		
	(5)	From note 5 of page 9 of Sub-Schedule DWD-4.		
	(6)	From note 6 of page 9 of Sub-Schedule DWD-4.		
	(7)	Average of lines 4, 7, and 8.		
	(8)	Average of mean and median beta from page 6 of this Sub-Schedule.		
	Sou	rces of Information:		
		Charles Davids Dilla and Laffettan 2017 CDDI Varida all Ialan Wiland	C I	

Stocks, Bonds, Bills, and Inflation - 2017 SBBI Yearbook, John Wiley & Sons, Inc.

**Value Line** Summary and Index

Blue Chip Financial Forecasts, June 1, 2017 and September 1, 2017

**Bloomberg Professional Services** 

Traditional CAPM and ECAPM Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the Proxy Group of Eight Water Companies Indian Hills Utility Operating Company, Inc.

[8]	Indicated Common Sst Equity Cost Rate (3)	% 11.11 % 11.71 % 10.58 10.20 11.94 10.88 11.26 10.13 9.68 11.03 10.51 10.81 1
[7]	ECAPM Cost Rate	11.26 11.77 10.81 10.48 11.97 11.06 11.39 10.42 10.03 11.19 10.74 10.61 11.00 11.32 10.61 11.00 11.00 11.00 11.00
[9]	Traditional CAPM Cost Rate	10.96 % 11.65 10.35 9.92 11.90 10.70 11.13 9.84 9.32 10.87 10.10 10.61 11.04 10.10 10.61 10.61 10.61 10.57 %
[2]	Risk-Free Rate (2)	3.56 3.56 3.56 3.56 3.56 3.56 3.56 3.56
[4]	Market Risk Premium (1)	% 8.60 8.60 8.60 8.60 8.60 8.60 8.60 8.60
[3]	Average Beta	0.86 0.94 0.79 0.74 0.97 0.83 0.85 0.67 0.85 0.78 0.82 0.82 0.82 0.82 0.82
[2]	Bloomberg Beta	0.91 1.03 0.84 0.79 1.09 0.90 0.75 0.75 0.95 0.95 0.95 0.95
[1]	Value Line Adjusted Beta	0.80 0.75 0.70 0.70 0.70 0.70 0.80 0.80 0.75 0.75 0.70 0.80 0.80 0.80 0.80
	Proxy Group of Seventeen Non- Price Regulated Companies	ABM Industries Inc. Bright Horizons Fami Cheesecake Factory CBOE Holdings Chemed Corp. CME Group Forrester Research Genpact Limited Hormel Foods Intercontinental Exc Lancaster Colony Lilly (Eli) Mercury General O'Reilly Automotive Pinnacle Foods Target Corp. WD-40 Co.

Notes:

From Sub-Schedule DWD-5, note 1.
 From Sub-Schedule DWD-5, note 2.
 Average of CAPM and ECAPM cost rates.

### Company Cost of Capital Calculation Indicated Return on Common Equity based on Differences in Leverage and Weighted Average Cost of Capital

[A]	[B]	[C]	[D]	[E]
<u>Description</u>	Weight (%) (1)	Cost	Weighted Cost (2)	Pre-Tax Weighted Cost
ROE Applicable to the Proxy Group of Eight	Water Companies			
Long-Term Debt Equity Weighted Average Cost of Capital	46.13% 53.87%	,	(3) 6.46% (4) 5.58% 12.04%	6.46% 9.16% 15.62%
	Weight (%) (6)	Cost	Weighted Cost (2)	Pre-Tax Weighted Cost
ROE Applicable to Indian Hills Capital Struc		14.000/- (	72) 10 900/	10.900/
Long-Term Debt Common Equity Weighted Average Cost of Capital	77.12% 22.88%	•	(3) 10.80% (9) 2.94% (8) 13.73%	10.80% 4.82% 15.62%

2.490%

Notes:

(1) Average capital structure maintained by the Proxy Group of Eqight Water Utilities used to derive the indicated cost of common equity.

**Indicated Financial Risk Adjustment** 

- (2) Column [B] \* Column [C].
- (3) Actual cost of long-term debt of Indian Hills.
- (4) Indicated common equity cost rate derived from the market data of the Proxy Group of Eight Water Companies from page 2 of Sub-Schedule DWD-1.
- (5) Assuming a composite Federal and State income tax rate of 39.06%, the pre-tax weighted cost of common equity based on the recommended common equity cost rate of 10.35% and average proxy group capital structure is: 9.16%. 9.16% = 5.58%/(1 0.3906).
- (6) From page 1 of Sub-Schedule DWD-1
- (7) Pre-tax weighted cost rate of common equity equals the pre-tax overall weighted cost rate (15.62%) minus the weighted cost rate of debt (10.80%). 15.62% 10.80% = 4.82%.
- (8) Pre-tax weighted overall cost of capital multiplied by (1 effective tax rate).  $4.82\% \times (1 39.06\%) = 2.94\%$
- (9) Weighted cost of common equity calculated as the pre-tax weighted cost of common equity, 2.94%, divided by the Company's actual equity ratio, 22.88%. 12.84% = 2.94% / 22.88%.

	T.1	P-7	۷.	8-3				î	•	B-6	0,	21	B-7	8 <u>.</u> 8	
Average Mkt. Portfolio Rank Value (in by Size \$\mathbb{s}\$ millions)	ct. Smoothed Premium over CAPM	Average Book Val. (in \$millions)	Smoothed Premium over CAPM	Average Net Inc. (in \$millions)	Smoothed Premium over CAPM	MVIC (in \$millions)	Smoothed Premium over CAPM	Total Assets (in \$millions)	Smoothed Premium over CAPM	5 yr Average EBITDA (in \$millions)	Smoothed Premium over CAPM	Sales (in \$millions)	Smoothed Premium over CAPM	Average Number of Employees	Smoothed Premium over CAPM
1 \$ 238,299	99 -1.78%	\$ 67,532	0.98%	\$ 10,101	0.54%	\$ 277,921	-1.02%	\$ 161,117	52.00%	\$ 22,452	0.87%	\$ 123,791	0.88%	341,434	0.43%
2 60,613		21,719	1.68%	2,747	1.48%	77,365	0.28%	51,936	1.39%	6,905	1.65%	38,382	1.75%	107,466	1.40%
3 35,630		14,074	1.95%	1,735	1.81%	46,877	0.79%	35,110	1.69%	4,343	1.96%	22,044	2.17%	64,944	1.82%
4 23,756		9,200	2.22%	1,183	2.08%	32,471	1.16%	25,351	1.95%	3,136	2.17%	17,114	2.35%	46,747	2.09%
5 17,471		6,875	2.40%	853	2.31%	24,248	1.45%	18,141	2.20%	2,192	2.41%	13,286	2.54%	34,256	2.35%
		5,488	2.54%	627	2.53%	18,506	1.73%	14,376	2.38%	1,632	2.60%	10,376	2.73%	26,595	2.57%
		4,590	2.65%	516	2.67%	15,426	1.91%	11,035	2.59%	1,338	2.74%	8,400	2.88%	22,447	2.71%
		3,716	2.78%	408	2.84%	13,457	2.05%	9,004	2.74%	1,133	2.85%	6,977	3.02%	18,590	2.86%
		3,112	2.89%	340	2.97%	10,762	2.28%	7,861	2.85%	934	2.97%	5,938	3.14%	15,489	3.02%
		2,586	3.01%	295	3.07%	8,658	2.50%	6,771	2.96%	799	3.08%	5,106	3.25%	13,344	3.14%
		2,266	3.09%	244	3.21%	7,453	2.65%	5,710	3.09%	299	3.20%	4,435	3.36%	11,841	3.24%
12 4,791	91 2.85%	2,012	3.16%	213	3.31%	6,455	2.79%	4,998	3.19%	578	3.29%	3,740	3.48%	10,389	3.35%
		1,751	3.25%	185	3.41%	5,466	2.96%	4,290	3.31%	478	3.42%	3,184	3.60%	9,004	3.47%
		1,500	3.34%	160	3.51%	4,718	3.11%	3,661	3.43%	411	3.52%	2,771	3.71%	7,588	3.61%
		1,303	3.43%	141	3.60%	4,043	3.27%	3,160	3.55%	371	3.59%	2,509	3.78%	6,511	3.74%
		1,174	3.50%	119	3.73%	3,541	3.40%	2,735	3.66%	327	3.67%	2,276	3.85%	5,710	3.85%
		1,030	3.58%	100	3.85%	3,075	3.55%	2,345	3.78%	287	3.76%	1,980	3.96%	4,908	3.98%
		861	3.69%	84	3.97%	2,587	3.72%	1,927	3.93%	253	3.84%	1,670	4.08%	4,194	4.11%
		711	3.81%	29	4.14%	2,109	3.93%	1,621	4.06%	211	3.96%	1,412	4.21%	3,507	4.26%
		277	3.94%	25	4.31%	1,696	4.15%	1,363	4.19%	164	4.13%	1,181	4.34%	2,908	4.42%
Ţ		479	4.05%	42	4.47%	1,323	4.40%	1,069	4.38%	125	4.31%	969	4.49%	2,328	4.60%
		382	4.19%	34	4.62%	1,014	4.67%	801	4.60%	94	4.49%	797	4.63%	1,797	4.82%
23		303	4.34%	24	4.86%	738	4.99%	009	4.82%	74	4.66%	589	4.86%	1,281	5.10%
	370 5.89%	207	4.57%	15	2.20%	513	2.36%	429	2.08%	51	4.90%	407	5.13%	871	5.42%
	121 7.22%	92	5.19%	ĸ	6.02%	163	6.52%	161	5.83%	17	5.63%	129	2.99%	305	6.30%
	Doctolic		Doutfolio		Dortfolio		Dortfolio		Doutfolio		Dortfolio		Domfolio		Dortfolio
B-1 Value		B-2 Value		B-3 Value	Ranking	B-4 Value	Ranking	B-5 Value	Ranking	B-6 Value	Ranking	B-7 Value	Ranking	B-8 Value	Ranking
Proxy Group of Eight Water Companies \$ 3,383	ا ا د	\$ 1,152	1	\$ 104	17	\$ 4,769	14	\$ 3,961	13-14	\$ 302	16-17	\$ 723	21-22	1,417	22-23
Indian Hills Utility Operating Company, Inc. \$ 1.30	10 25	\$ 0.43	25	NA	NA	\$ 2.94	25	\$ 2.23	25	NA	NA	\$ 0.07	25	9	25
Indicated Risk Premium Relative to Ms. Freetty's Water Proxy Group	3.94%	1.69%	%	NA		3.41%	%	2.46%	%	NA	∀	1.4	1.43%	1.34%	,o

Sources of Information: Duff & Phelps 2017 Valuation Handbook Exhibit B-1 through B-8 SNL Financial Company Form 10-K

2.38%

Indicated Size Risk Premium