



STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION

ILLINOIS-AMERICAN WATER COMPANY :  
: Docket No. 07-0507  
Proposed General Increase In Water Rates :

Direct Testimony of Brian Janous

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A My name is Brian Janous and my business address is 1215 Fern Ridge Parkway,  
3 Suite 208, St. Louis, MO 63141-2000.

4 Q WHAT IS YOUR OCCUPATION?

5 A I am an energy advisor and a consultant in the field of public utility regulation in the  
6 firm of BAI (Brubaker & Associates, Inc.).

7 Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND  
8 EXPERIENCE.

9 A These are set forth in Appendix A to my testimony.

10 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

11 A I am appearing on behalf of the Illinois Industrial Water Consumers (IIWC). IIWC  
12 consists of large water users taking water service from Illinois-American Water  
13 Company (Illinois-American or Company).

14 Q **WHAT IS THE SUBJECT OF YOUR TESTIMONY?**

15 A I will recommend an appropriate return on common equity (ROE), and overall rate of  
16 return (ROR) for Illinois-American Water Company (Illinois-American or Company).

17 Q **PLEASE SUMMARIZE YOUR RECOMMENDATIONS.**

18 A I recommend the Illinois Commerce Commission (Commission) authorize a return on  
19 common equity for Illinois-American of 9.9%. A 9.9% return on common equity will  
20 provide adequate earnings and cash flow coverage to support an "A" Bond Rating  
21 from Standard & Poor's (S&P) which reflects American Water Capital Corp's current  
22 bond rating In addition a 9.9% ROE would allow Illinois-American to maintain access  
23 to capital markets under reasonable terms and at reasonable prices. American Water  
24 Capital Corp. is the affiliate entity which issues debt on behalf of all American Water  
25 Works water utility affiliates, including Illinois-American.

26 My recommended return on equity for Illinois-American is based on  
27 discounted cash flow (DCF), and capital asset pricing model (CAPM) analyses.  
28 These analyses estimate a fair return on equity based on observable market  
29 information for a group of publicly traded risk proxy companies comparable in risk to  
30 Illinois-American.

31 Q **ARE THERE ANY OTHER METHODS FOR CALCULATING APPROPRIATE  
32 RETURNS ON EQUITY FOR UTILITY COMPANIES?**

33 A Yes. The risk premium methodology is another approach that provides valid  
34 estimates of a utility's ROE. However, the Commission's historical position has been  
35 not to consider risk premium results in the determination of a utility's authorized ROE.  
36 Consequently, I have not included a risk premium analysis in this testimony.

37 Q DID YOU DETERMINE THAT A 9.9% COMMON EQUITY RETURN WILL  
38 SUPPORT ILLINOIS-AMERICAN'S CREDIT AND FINANCIAL INTEGRITY?

39 A Yes. As I will demonstrate in my testimony, with a 9.9% return on equity,  
40 Illinois-American's capital structure and embedded cost of debt and preferred equity,  
41 will support credit rating financial metrics that meet S&P's guidelines to maintain an  
42 investment grade bond rating of "A," the bond rating for Illinois-American's affiliate,  
43 American Water Capital Corp. Hence, my recommended return on equity is both fair  
44 compensation for Illinois-American investment risk, and is also sufficient to maintain  
45 Illinois-American's financial integrity and the ability to attract capital to fund needed  
46 infrastructure improvements.

47 Q PLEASE DESCRIBE HOW ILLINOIS-AMERICAN ATTRACTS EXTERNAL DEBT  
48 AND EQUITY CAPITAL.

49 A Illinois-American does not access external capital markets on its own, rather it gets all  
50 of its external capital through its parent company or affiliate companies. All external  
51 equity comes from its parent company American Water Works, and all corporate debt  
52 capital is issued by American Water Capital Corp. As such, Illinois-American's entire  
53 access to external corporate debt and equity capital is determined by its parent  
54 company and affiliates' credit standing and access to capital.

55 Q WHAT RATE OF RETURN ARE YOU PROPOSING FOR ILLINOIS-AMERICAN IN  
56 THIS PROCEEDING?

57 A As shown on Exhibit 3.1, I recommend an overall rate of return of 7.66%.

58 Q PLEASE DESCRIBE AMERICAN WATER CAPITAL CORP.'S CREDIT RATING.

59 A American Water Capital Corp. has a credit rating of "A-" from Standard & Poor's and  
60 "Baa1" from Moody's. Standard & Poor's states the following concerning American  
61 Water Works' credit rating and assessment of its credit quality:

62 The ratings on . . . American Water Capital Corp. reflect the  
63 stand-alone credit quality of American Water Works. American Water  
64 Capital is a wholly owned subsidiary of American Water Works, which  
65 serves as the funding vehicle for American Water Works' regulated  
66 water utility subsidiaries. . . .

67 American Water Works' stand-alone business risk profile is "2"  
68 (excellent). (Utility business profiles are categorized from "1"  
69 (excellent) to "10" (vulnerable)). The business profile stems from  
70 insulation from competition, geographically diverse and largely  
71 residential markets, supportive regulatory environment, and the  
72 relatively low operating risk of managing groundwater and water  
73 treatment facilities. Uncertainty associated with American Water  
74 Works' IPO in 2007, increasingly stringent water quality standards, and  
75 the company's reliance on acquisitions to provide growth partly offsets  
76 its strengths. ("American Water Works Co. Inc.," Standard & Poor's  
77 Credit Ratings, November 1, 2006, page 1-2 emphasis added).

78 Q SHOULD THE COMMISSION PLACE HEAVY RELIANCE ON PROJECTED  
79 INTEREST RATES AND FUTURE CAPITAL MARKET COSTS RELATIVE TO  
80 TODAY'S OBSERVABLE CAPITAL MARKET COSTS?

81 A No. While projected interest rates should be given some consideration, the  
82 determination of Illinois-American's cost of capital today should be based primarily on  
83 observable and verifiable actual current market costs. The accuracy of projected  
84 changes to interest rates is highly problematic. In fact, over the past five years, the  
85 actual interest rate experienced at the time an interest rate projection was made has  
86 been a better indicator of the interest rate that would be experienced two years later  
87 than the then projected interest rate.

88                   An analysis supporting this conclusion is illustrated on my Exhibit 3.2. This  
89 analysis clearly illustrates that interest rate projections based on current interest rates  
90 are likely to be as accurate as economists' consensus projections of future interest  
91 rates.

92                   On Exhibit 3.2, under Column 1, I show the actual market yield at the time a  
93 projection was made for Treasury bond yields two years in the future. In Column 2, I  
94 show the projected yield two years out. As shown in Columns 1 and 2, over the last  
95 five years Treasury yields were projected to increase relative to the current Treasury  
96 yields at the time of the projection.

97                   In Column 4, I show the actual Treasury yield two years after the forecast.  
98 Under Column 5, I show the difference between the actual yield and the originally  
99 projected yield.

100                   As shown on this exhibit, over the last five years economists have consistently  
101 been projecting increases to interest rates. However, as demonstrated under Column  
102 5, those yield projections have turned out to be overstated in virtually every case.  
103 Indeed, Treasury yields have actually decreased or remained flat over the last five  
104 years, rather than increase as the economists' projections indicated. Further, as  
105 shown under Column 6, interest rates have stayed relatively flat compared to the  
106 prevailing interest rate at the time the forecast was made.

107                   The experience with projected interest rates over the last five years shown on  
108 Exhibit 3.2 clearly establishes that interest rate projections can be highly inaccurate.  
109 Indeed, current observable interest rates are just as likely a reasonable a proxy for  
110 future interest rates as are economists' projections. Accordingly, while I will use  
111 projected interest rates to provide some sense of the market's expectations of future  
112 capital market costs in my models, I will not use them exclusively. Rather, my cost of

113 equity analyses will be based on the combination of current observable interest rates  
114 and projected interest rates. Thus, my analyses will capture a return on equity range  
115 reflecting a broad range of potential actual capital market costs during the period  
116 rates determined in this proceeding will be in effect.

117 **Q ARE THERE OTHER REASONS NOT TO PROVIDE EXCLUSIVE RELIANCE ON**  
118 **UNCERTAIN PROJECTED INCREASES TO INTEREST RATES?**

119 A Yes. The ratemaking process in itself provides utility protection against increased  
120 cost of capital. Indeed, if Illinois-American's utility subsidiaries' rates of return are set  
121 based on today's market cost of capital, and capital costs increase in the future, then  
122 the utilities are free to file for a rate change to reflect those higher costs. Hence, the  
123 regulatory mechanism itself provides utilities a hedge against increasing capital costs.

#### 124 **Return On Common Equity**

125 **Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED**  
126 **COMPANY'S COST OF COMMON EQUITY.**

127 A Two United States Supreme Court decisions are often cited as establishing the  
128 framework for determining a fair cost of common equity for a regulated utility:  
129 Bluefield Water Works vs. West Virginia PSC (1923); and Federal Power Commission  
130 vs. Hope Natural Gas Company (1944). These decisions identified the general  
131 standards to be considered in establishing the cost of common equity for a public  
132 utility. These standards are that the authorized return should: (1) be sufficient to  
133 allow the utility to maintain financial integrity; (2) allow the utility to attract capital

134 under reasonable terms; and (3) be commensurate with returns investors could earn  
135 by investing in other enterprises of comparable risk.

136 **Q PLEASE DESCRIBE WHAT IS MEANT BY "UTILITY'S COST OF COMMON**  
137 **EQUITY."**

138 A A utility's cost of common equity is the return investors expect, or require, in order to  
139 make an investment. Investors expect to achieve their return requirement from  
140 receiving dividends and stock price appreciation.

141 **Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST**  
142 **OF COMMON EQUITY FOR ILLINOIS-AMERICAN.**

143 A I have used financial models to estimate Illinois-American's cost of common equity.  
144 These models are: (1) the constant growth discounted cash flow (DCF) model; (2) a  
145 two-stage growth DCF model; and (3) a capital asset pricing model (CAPM).

146 **Q HOW DID YOU DEVELOP DCF AND CAPM ANALYSES FOR**  
147 **ILLINOIS-AMERICAN?**

148 A Since Illinois-American is not a publicly traded entity, I performed the DCF and CAPM  
149 analyses on two risk proxy utility groups consisting of publicly traded utilities that  
150 represent the investment risk of a water utility similar to Illinois-American. First, I  
151 relied on a group of publicly traded companies that are predominantly involved in the  
152 water utility business. Second, I used a group of local natural gas distribution  
153 companies (LDC). The business risk of a gas LDC group is generally greater than  
154 that a water utility company. However, gas utilities are more widely followed. Also,  
155 the water utility industry continues to be impacted by acquisition and mergers which

156 can impact valuation and the reliability of return on equity estimates. Hence, the use  
157 of the gas LDC group will help improve the reliability of my return on equity estimate.

158 **Q HOW DID YOU SELECT YOUR WATER UTILITY GROUP?**

159 A I relied on the water utilities included in the Value Line Investment Analyzer.

160 **Q IS YOUR WATER UTILITY PROXY GROUP COMPARABLE IN RISK TO**  
161 **ILLINOIS-AMERICAN?**

162 A Yes. This group reflects reasonably comparable investment risk as Illinois-American.  
163 As shown on my Exhibit 3.3 page 1, this group has a group average bond rating of "A"  
164 from S&P, and "A2" from Moody's, which is reasonably comparable to American  
165 Water Capital's bond ratings of "A-" and "Baa1" from each of these rating agencies.  
166 The group has an average S&P business profile score of "3" which is compared to  
167 American Water Capital Corp.'s profile score of "2." The group's higher business  
168 profile score indicates higher business risk than that of Illinois-American. The group's  
169 average common equity ratio from Value Line and AUS Utility Reports is 53% and  
170 51%, respectively, which is higher than the common equity ratio for Illinois-American  
171 of 44%. Consequently, the group has slightly lower financial risk (i.e. less debt), but  
172 slightly higher business risk than Illinois-American (i.e. business profile score of "3").  
173 Overall, the group's total risk (business and financial) is comparable to Illinois-  
174 American.

175 **Q HOW DID YOU SELECT YOUR GAS LDC GROUP?**

176 A I started with the natural gas distribution companies followed by Value Line and I  
177 excluded the companies that did not meet the following criteria:

178 (1) Investment grade credit rating from Standard & Poor's (S&P) and Moody's.

179 (2) Common equity ratio equal to or greater than 40.0%.

180 (3) No suspended or reduced dividends over the last two years.

181 (4) Consensus analysts' growth rate estimates from Zack's, Reuters and SNL.

182 (5) No involvement in recent merger and acquisition activities.

183 This group is shown on Exhibit 3.3, page 2.

184 **Q IS YOUR GAS LDC PROXY GROUP COMPARABLE IN RISK TO**  
185 **ILLINOIS-AMERICAN?**

186 A Yes. As shown on my Exhibit 3.3, page 2, the gas LDC group has similar risk profile  
187 measures to Illinois-American. The average gas proxy group bond rating is "A" and  
188 "A3" from Standard & Poor's and Moody's, respectively, which is reasonably  
189 comparable to American Water Capital Corp.'s current bond rating. Also, the group's  
190 common equity ratio of 55% to 50%, representative of financial risk, is reasonably  
191 comparable to Illinois-American's ratio of 45%. Further, the average business risk  
192 profile score from Standard & Poor's for the gas proxy group is "3" indicating a  
193 business risk that is similar to, though slightly higher than, Illinois-American's  
194 business risk". These facts indicate that the total risk of this proxy group is  
195 comparable to Illinois-American.

196 **Discounted Cash Flow (DCF) Model**

197 **Q PLEASE DESCRIBE THE DCF MODEL.**

198 A The premise of the DCF model is that the price of an individual stock is determined by  
199 the present value of all expected future cash flows discounted at the investors'  
200 required rate of return or cost of capital. This model is expressed mathematically as  
201 follows:

202 
$$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} + \dots + \frac{D_\infty}{(1+K)^\infty}$$
 where (Equation 1)

203  $P_0$  = Current stock price  
204  $D$  = Dividends in periods 1 -  $\infty$   
205  $K$  = Investor's required return

206 This model can be rearranged in order to estimate the discount rate or  
207 investor required return, "K."  
208

209 
$$K = D_1/P_0 + G$$
 (Equation 2)

210  $K$  = Investor's required return  
211  $D_1$  = Dividend in first year  
212  $P_0$  = Current stock price  
213  $G$  = Expected constant dividend growth rate

214 Equation 2 is referred to as the "constant growth" annual DCF model since it  
215 assumes that earnings and dividends will grow at a constant rate.

216 **Q PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.**

217 A As shown under Equation 2 above, the DCF model requires a current stock price,  
218 expected dividend, and expected growth rate in dividends.

219 **Q WHAT STOCK PRICE HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH**  
220 **DCF MODEL?**

221 A For my proxy groups I relied on the average of the weekly high and low stock prices

222 over a 13-week period ending December 28, 2007. An average stock price over a  
223 period of time is less susceptible to market price movements than a price on a single  
224 day.

225 A 13-week average stock price is short enough to contain data that  
226 reasonably reflects current market expectations, but it is not too short to be  
227 susceptible to market price variations that may not be reflective of the security's  
228 long-term value. Therefore, in my judgment, a 13-week average stock price is a  
229 reasonable balance between the need to reflect current market expectations and to  
230 capture sufficient data to smooth out aberrant market movements.

231 **Q WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF MODEL?**

232 A I used the most recently paid quarterly dividend, as reported in the Value Line  
233 Investment Survey. This dividend was annualized (multiplied by 4) and adjusted for  
234 next year's growth to produce the D<sub>1</sub> factor for use in Equation 2 above.

235 **Q WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR DCF MODEL?**

236 A The growth rate used for the DCF model should be based upon the likely growth  
237 estimate that is built into stock prices. Although an individual investor may use a  
238 number of methods to estimate the expected growth in dividends, one must  
239 determine the consensus of investor expectations with respect to growth rates.  
240 Security analyst growth estimates have been shown to be more accurate predictors  
241 of future growth than historical growth rates. Assuming that markets are generally  
242 rational, one can reasonably assume that investors are using security analyst  
243 estimates in determining how to correctly value a stock. In other words, security  
244 analyst growth estimates are the most likely growth estimates that are built into stock

245 prices. Consequently, I have used consensus security analyst growth estimates as a  
246 reasonable proxy for investor's expectations of future growth.

247 I used an average of three analyst sources of customer growth rate estimates  
248 for my proxy group of companies: SNL, Reuters, and Zacks. All consensus  
249 projections were reported on-line on January 2, 2008. The consensus estimate is a  
250 simple average of surveyed analysts' earnings growth forecasts.

251 A simple average of the growth forecasts gives equal weight to all surveyed  
252 analysts' projections. To avoid using only one particular analyst's forecast, which  
253 may or may not be more representative of general market expectations, I used a  
254 simple average, or arithmetic mean, of multiple analyst forecasts to arrive at a good  
255 proxy for market consensus expectations. The growth rates I used in my DCF  
256 analysis are shown on my Exhibit 3.4.

257 **Q WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?**

258 A The results of my DCF analyses are shown on Exhibit 3.5. As shown on Exhibit 3.5,  
259 page 1, the average DCF cost of common equity for the water proxy group is 12.5%.  
260 On Exhibit 5, page 2, the gas proxy group DCF cost of common equity is 9.2%.

261 My constant growth DCF study indicates a return on equity of 9.2% to 12.5%,  
262 with a mid-point of 10.9%.

263 **Q DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR**  
264 **WATER UTILITY DCF ANALYSIS?**

265 A Yes. The comparable water group average five-year growth rate is 9.58% and is too  
266 high to be sustainable over an indefinite period of time. The gas proxy group's three  
267 to five-year growth rate is reasonable. The water proxy group's three to five year

268 growth rate exceeds the growth rate of the overall U.S. economy. Based on  
269 consensus economic projections, as published by Blue Chip Economic Indicators, the  
270 five- to ten-year U.S. economy, or GDP, is estimated to grow at a nominal rate of  
271 5.0%.<sup>1</sup> A company cannot grow, indefinitely, at a faster rate than the market in which  
272 it sells its products. The U.S. economy growth projection represents a ceiling, or high  
273 end, sustainable growth rate for a utility over an indefinite period of time.

274 A utility cannot sustain a growth rate that exceeds the growth rate of the  
275 overall economy, because a utility's earnings/dividend growth is created by increased  
276 utility investment, which in turn is driven by service area economic growth. In other  
277 words, utilities invest in plant to meet sales demand growth, and sales growth in turn  
278 is tied to economic growth in their service area. Hence, nominal GDP growth is a  
279 proxy for sales growth, utility rate base growth, and earnings growth. Therefore, GDP  
280 growth is the highest sustainable long-term growth rate of a utility.

281 Moreover, the water proxy group's projected growth rate of 9.58% is  
282 considerably higher than the historical growth rate the proxy group has achieved over  
283 the last five to ten years. As shown on Exhibit 3.6, page 1, the historical growth of my  
284 proxy group's dividend is substantially lower than the nominal GDP growth.

285 The result of this excessive 9.58% growth rate is a ROE estimate of 12.5%,  
286 which, as I will demonstrate, is so far above the results of my other ROE estimates as  
287 to call into question its validity.

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<sup>1</sup> Blue Chip Economic Indicators, October 10, 2007.

288 Q DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR GAS  
289 PROXY GROUP DCF RESULT?

290 A Yes. The gas proxy DCF growth rate of 5.16% is a more reasonable estimate of  
291 long-term sustainable growth for a utility company than the growth rate indicated by  
292 my water group. However, as noted above, the maximum sustainable growth rate is  
293 proxied by the GDP growth rate which is currently 5.0%. Also, note that the gas  
294 proxy group's projected growth rate of 5.16% is very high in comparison to historical  
295 growth for these proxy companies. As shown on Exhibit 3.6, page 2, the forward-  
296 looking growth rate is considerably higher than it has been in the past, and past  
297 growth has been much closer to the inflation rate than it has been to actual GDP  
298 growth. Hence, the current projected growth, which is slightly higher than forward-  
299 looking GDP growth, is a very robust growth outlook for these proxy groups.

300 Further, the current and projected payout ratios of my gas group are 59% and  
301 60%, respectively. This indicates that the utilities are retaining a large percentage of  
302 their earnings, which will help support future growth through earnings and dividends.  
303 This again indicates the viability and reasonableness of my gas utility DCF estimate.

304 Finally, the current and projected dividend-to-book ratio of my gas utility group  
305 is 7.2% and 6.9%, respectively. This indicates that the dividend is affordable in  
306 today's low-cost capital market environment, and utilities could support that dividend  
307 at an authorized return on equity well under 10% and still retain adequate earnings to  
308 meet future growth expectations.

309 Q **WHY DO YOU BELIEVE GROWTH RATES FOR WATER UTILITY COMPANIES**  
310 **ARE PROJECTED TO BE SO HIGH OVER THE NEXT THREE TO FIVE YEARS?**

311 A Water utility companies are in the midst of major construction programs which are  
312 significantly increasing their outstanding capital and net plant investment. The Value  
313 Line Investment Survey is projecting a growth in the water utility industry's net utility  
314 plant and capital over the next three to five years of 41% and 49%, respectively.<sup>2</sup>  
315 Replacement of infrastructure and the improvements to water treatment plants to  
316 meet more stringent environmental requirements results in strong growth to utilities'  
317 rate base, and growth in earnings. This growth in earnings will be realized over the  
318 next five years or so, but will eventually return to more normalized long-term  
319 sustainable levels.

320 It is simply not reasonable to expect that the earnings projections over the  
321 next three to five years will be sustainable indefinitely.

322 Q **SINCE YOU HAVE CONCLUDED THAT YOUR WATER UTILITY GROWTH RATE**  
323 **USED IN YOUR CONSTANT GROWTH DCF MODEL IS NOT SUSTAINABLE, DO**  
324 **YOU BELIEVE THAT THE RESULTS OF YOUR CONSTANT GROWTH DCF**  
325 **MODEL FOR YOUR WATER UTILITY PROXY GROUP IS REASONABLE?**

326 A No, the results of my water utility constant growth DCF model are unreasonably high  
327 because it reflects a growth rate that is not sustainable over an indefinite period of  
328 time. However, the growth rate is based on consensus analysts' growth rate  
329 projections, so it is a reasonable reflection of rational investment expectations over  
330 the next three to five years. The limitation on the constant growth DCF model is that  
331 it does not reflect a rational expectation that this short-term growth rate will likely be

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<sup>2</sup> The Value Line Investment Survey, April 27, 2007 at 1419.

332 followed by slower growth at a more long-term sustainable level thereafter. Hence, I  
333 have performed a two-stage DCF analysis to reflect this expectation and to test the  
334 impact on the water utility DCF results. While I believe the results for my gas proxy  
335 group are reasonable, I have also constructed a two-stage DCF model to illustrate the  
336 impact on the DCF results for my proxy gas group as well.

337 **Two-Stage DCF Model**

338 **Q WHY DO YOU PROPOSE TO USE A TWO-STAGE DCF MODEL TO TEST THE**  
339 **RESULTS OF YOUR CONSTANT GROWTH DCF STUDY?**

340 A I propose to use a two-stage DCF model because the growth rates used in my  
341 constant growth model do not reflect reasonable estimates of sustainable long-term  
342 growth. While consensus analysts' growth rate estimates are likely reflective of  
343 investors' expectations over the next three to five years, professional investors would  
344 not expect those growth rates to remain in effect indefinitely. As noted above, utilities  
345 cannot grow faster than the economies in which they sell their services. Historically,  
346 utility sales have grown at a rate that trails the growth in the overall U.S. economy.

347 As such, a two-stage DCF model can capture the value of this extraordinary  
348 growth over the next five years, followed by a period of sustainable long-term growth  
349 thereafter.

350 **Q PLEASE DESCRIBE YOUR TWO-STAGE DCF MODEL.**

351 A The two-stage DCF growth model reflects the possibility of non-constant growth to the  
352 company over time. The two-stage reflects two growth periods: (1) a short-term  
353 growth period, which consists of the first five years; and (2) a long-term growth

354 period, which consists of each year starting in year six through perpetuity. For the  
355 short-term growth period, I relied on the consensus analysts' growth projections  
356 described above in relationship to my constant growth model. For the long-term  
357 growth period, I assumed each company's growth would increase toward the  
358 maximum sustainable growth rate for a utility company using as a proxy the  
359 consensus analysts' projected growth for the U.S. GDP.

360 **Q WHAT STOCK PRICE, DIVIDEND AND GROWTH RATE DID YOU USE IN YOUR**  
361 **MULTI-STAGE DCF ANALYSIS?**

362 A I relied on the same 13-week stock price, the most recent quarterly dividend payment,  
363 and consensus analysts' growth rate projections discussed above in my constant  
364 growth DCF model. However, for the long-term sustainable growth rate starting in  
365 year six, I used the consensus economists' five to ten-year projected GDP normal  
366 growth rate of 5.0%.

367 **Q WHAT ARE THE RESULTS OF YOUR TWO-STAGE GROWTH DCF MODEL?**

368 A As shown on the attached Exhibit 3.7, pages 1 and 2, the resulting common cost of  
369 equity from my two-stage DCF growth estimate for my water proxy group is 8.4% and  
370 the gas proxy group is 9.0%. As such, the two-stage DCF model indicates a return  
371 on equity for Illinois-American in the range of 8.4% to 9.0%, with a mid-point of 8.7%.

372 **Quarterly Compounding DCF Adjustment**

373 **Q Please explain quarterly compounding?**

374 A The Illinois Commerce Commission has, in past cases, required an adjustment to  
375 DCF results for quarterly compounding. Adjusting an annual return for quarterly  
376 compounding will increase the result due to the fact that reinvested interest would be  
377 accrued each quarter resulting in a cumulative return that is higher than the annual  
378 return.

379 **Q HOW WOULD THE RESULTS OF YOUR DCF MODELS CHANGE IF QUARTERLY**  
380 **COMPOUNDING WERE USED?**

381 A Quarterly compounding reflects dividend reinvestment return in the investor's  
382 expected return. Investors price a security based on the total achievable return  
383 objectives, including the expectations of quarterly reinvestment returns. However, if  
384 those quarterly reinvestment returns are built into the authorized return on common  
385 equity, then investors will be provided an opportunity to earn this reinvestment return  
386 twice – first through the authorized return on equity, and a second time as dividends  
387 are paid to investors, and reinvested. Consequently, I do not believe that the  
388 quarterly version of the DCF model should be used to set the authorized return on  
389 equity for regulated utility operations. Nevertheless, I understand this is a long-  
390 standing practice by the Illinois Commerce Commission, so I will adjust my DCF  
391 results for quarterly compounding.

392 The results of my constant growth and two-stage DCF models produced  
393 returns of 10.9% and 8.7%, respectively. Adjusting these annual DCF models for  
394 quarterly compounding would increase the DCF returns by approximately 20 basis

395 points.<sup>3</sup> Hence, reflecting quarterly compounding my DCF returns would be 11.1%  
396 and 8.9%. I will use the quarterly DCF result to form my recommended return for  
397 Ameren in this proceeding.

398 **Capital Asset Pricing Model**

399 **Q PLEASE DESCRIBE THE CAPM.**

400 A The foundation of the CAPM method is that the risk of an individual stock that is  
401 relevant to an investor is not the standalone risk of that stock, but rather its  
402 contribution of risk to an investor's overall portfolio. The theoretical basis for the  
403 CAPM method is that the market requires a rate of return for security that is equal to  
404 the risk-free rate of return plus a risk premium that is adjusted for a particular stock's  
405 risk relative to the overall market risk. The formula for calculating the market required  
406 return under the CAPM method is as follows:

407 
$$R_i = R_f + B_i \times (R_m - R_f) \text{ where:}$$

408  $R_i =$  Required ROR for stock i  
409  $R_f =$  Risk-free rate  
410  $R_m =$  Expected return for the market portfolio  
411  $B_i =$  Measure of the risk for stock i

412 As demonstrated above, the market premium is the difference between the  
413 expected market return, less the risk-free rate of return. Under the CAPM method,  
414 this risk premium is adjusted by the beta coefficient to determine the particular risk  
415 premium that the market would assign to a specific security.

416 The CAPM theory maintains that investors will only be compensated for risks  
417 that cannot be diversified away by holding a well diversified portfolio of securities.  
418 These risks that are diversifiable are generally considered business specific risks and

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<sup>3</sup>  $(1 + \text{Annual DCF} \div 4)^4 - 1$  less Annual DCF

419 are not systematic to the market as a whole. In a well diversified portfolio, these  
420 non-systematic risks are eliminated by balancing in the portfolio with securities that  
421 react differently to firm specific risk factors.

422 The remaining risk, which is non-diversifiable, is referred to as systematic risk  
423 and is represented for a particular stock by the beta coefficient. The beta of a  
424 particular security is determined by its volatility relative to the market as a whole. A  
425 stock with a beta of 1.0 has volatility that is equal to the market, whereas a stock with  
426 a beta of 0.5 has half the volatility, or risk, of the market as a whole.

427 **Q HOW DID YOU DETERMINE THE RISK-FREE RATE USED IN YOUR CAPM**  
428 **ANALYSIS?**

429 A The risk-free rate is typically represented by U.S. Treasury securities. In my analysis  
430 I used Blue Chip Financial Forecasts' projected long-term Treasury bond yield of  
431 4.8% (Blue Chip Financial Forecast, December 1, 2007 at 2).

432 **Q WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE**  
433 **OF THE RISK-FREE RATE?**

434 A Treasury securities are backed by the full faith and credit of the United States  
435 government. Therefore, long-term Treasury bonds are considered to have negligible  
436 credit risk. Also, long-term Treasury bonds have an investment horizon similar to that  
437 of common stock. As a result, investor-anticipated long-run inflation expectations are  
438 reflected in both common stock required returns and long-term bond yields.  
439 Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate)  
440 included in a long-term bond yield is a reasonable estimate of the nominal risk-free  
441 rate included in common stock returns.

442 Treasury bond yields, however, include risk premiums related to unanticipated  
443 future inflation and interest rates. Therefore, a Treasury bond yield is not a truly  
444 risk-free rate. Risk premiums related to unanticipated inflation and interest rates are  
445 systematic or market risks. Consequently, for companies with betas less than one,  
446 using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis  
447 can produce an overstated estimate of the CAPM return.

448 **Q WHAT DID YOU USE FOR THE BETA TERM IN YOUR CAPM ANALYSIS?**

449 A I used the median beta estimate for my comparable group. Using the median beta for  
450 a group of comparable companies provides a more complete picture of the systematic  
451 risk facing an industry or a particular company in that industry. Using the group  
452 median beta, as opposed to an individual company beta, will result in a more reliable  
453 return on equity estimate. The current median beta for both my water group and gas  
454 group is .85 (Exhibit 3.8, page 1 and 2). As such, I have used .85 as the beta in my  
455 CAPM analysis.

456 **Q HOW DID YOU DETERMINE THE RETURN ON THE OVERALL MARKET IN**  
457 **ORDER TO DEVELOP YOUR RISK PREMIUM ESTIMATE?**

458 A I developed two market risk premium estimates for my CAPM analysis. The first is  
459 based on long-term historical market returns and the second is based upon forward  
460 looking projections.

461 The historical market return used to estimate the risk premium was provided  
462 by Ibbotson & Associates in the Stocks, Bonds, Bills and Inflation 2007 Yearbook  
463 (Ibbotson Study). The Ibbotson Study concluded that the arithmetic average of the  
464 total return on the S&P 500 for the period of 1926 through 2006 was 12.3%. For the

465 same period, the total return on long-term Treasury bonds was 5.8%. Hence, the  
466 indicated market risk premium is 6.5% (12.3% - 5.8% = 6.5%).

467 I developed my forward looking risk premium estimate by adjusting the  
468 historical real market return for projected inflation. Again, using the Ibbotson Study, I  
469 took the historical arithmetic average real market return between 1926 and 2006 of  
470 9.1% and added the current consensus analyst inflation projection through 2006 as  
471 measured by the Consumer Price Index (CPI). The expected market return using  
472 these estimates is 11.6%<sup>4</sup> and the resulting market risk premium is 6.8%  
473 (11.6% - 4.8% = 6.8%).

474 **Q PLEASE SUMMARIZE THE RESULTS OF YOUR CAPM ANALYSIS.**

475 A As shown on Exhibit 3.9, the CAPM method using both historical and projected  
476 market returns provides an estimate return on equity of 10.3% and 10.6%,  
477 respectively, with an average of 10.5%.

#### 478 **Return On Equity Summary**

479 **Q BASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON EQUITY**  
480 **ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO**  
481 **YOU RECOMMEND FOR ILLINOIS-AMERICAN?**

482 A Based on my analyses, I estimate an appropriate return on equity for Illinois-American  
483 to be 9.9%.

---

<sup>4</sup>  $[(1 + 0.091) * (1 + 0.023) - 1] * 100$

<b><u>Description</u></b>	<b><u>Result</u></b>
Gas Group DCF	9.3%
CAPM	10.5%

484 My analysis resulted in a range for my estimated return on equity for  
485 Illinois-American of 9.3% to 10.5%. The low end represents the results of my gas  
486 group DCF analysis. The upper end represents the results of my CAPM analysis.  
487 The mid-point of my estimated range, 9.9%, is my recommended ROE that should be  
488 used to set Illinois-American's rates in this proceeding.

489 For reasons discussed above, I found that certain inputs (namely projected  
490 growth rates) of my water group DCF analysis to be unreasonable. Consequently, I  
491 did not use these results in the determination of my recommendation. Instead I used  
492 the gas group result, which provides a more reasonable DCF estimate.

493 **Financial Integrity**

494 **Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT**  
495 **AMERICAN WATER CAPITAL'S CURRENT BOND RATING FROM S&P?**

496 A Yes. I have reached this conclusion by comparing the key credit rating financial  
497 ratios for Illinois-American at the Company's proposed capital structure and my return  
498 on equity to S&P's benchmark financial ratios for an "AA" rated utility and "A" rated  
499 utility with a business profile score of 2.

500 Q PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN  
501 ITS CREDIT RATING REVIEW.

502 A S&P evaluates a utility's credit rating based on an assessment of its financial and  
503 business risks. A combination of financial and business risks equates to the overall  
504 assessment of a company's total credit risk exposure. S&P publishes a matrix of  
505 financial ratios that defines the level of financial risk as a function of the level of  
506 business risk.

507 S&P rates a utility's business risk based on a business profile score of 1,  
508 lowest risk, up to 10, highest risk. Integrated water utilities typically have a business  
509 profile score from S&P of 4 to 6.

510 S&P publishes ranges for three primary financial ratios that it uses as  
511 guidance in its credit review for utility companies. The three primary financial ratio  
512 benchmarks it relies on in its credit rating process include: (1) funds from operations  
513 (FFO) to debt interest expense; (2) FFO to total debt; and (3) total debt to total  
514 capital.

515 Q HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE  
516 REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?

517 A I calculated each of S&P's financial ratios based on Illinois-American's cost of service  
518 for retail operations and Illinois-American's off-balance sheet debt for the test year.

519 While S&P would be concerned with total Illinois-American or American  
520 Capital Corporation consolidated financial ratios in its credit review process, my  
521 investigation in this proceeding is to judge the reasonableness of my proposed cost of  
522 capital for setting rates in Illinois-American's jurisdictional utility operations. Hence, I  
523 am attempting to determine whether the rate of return and cash flow generation

524 opportunity reflected in my proposed return on equity and IIRC witness Jim Collin's  
525 depreciation rate proposal for Illinois-American will support its financial integrity and  
526 credit metrics necessary to maintain American Water Capitals current "A-" investment  
527 grade bond ratings.

528 **Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR**  
529 **ILLINOIS-AMERICAN.**

530 A The S&P financial metric calculations for Illinois-American are developed on my  
531 Exhibit 3.10.

532 Based on an equity return of 9.9%, Illinois-American will be provided an  
533 opportunity to produce a Funds From Operations (FFO) to debt interest expense of  
534 3.9x. This FFO to interest coverage ratio is on the high end S&P's benchmark ratio  
535 range of 4.0x to 3.0x for an "AA" rated utility company, with a business profile score of  
536 2.

537 Illinois-American's total debt ratio to total capital is 56%. This is within the  
538 range of the S&P's "A" rated utility range of 52% to 58%.

539 Finally, Illinois-American's retail operations FFO to total debt coverage at a  
540 9.9% equity return would be 17%, which is again within S&P's financial metric range  
541 of 20% to 12% for an "A" rated utility company with a business profile score of 2.

542 At Illinois-American's proposed capital structure and my return on equity of  
543 9.9%, Illinois-American's financial metrics are supportive of at the least an "A" utility  
544 bond rating.

545 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

546 A Yes.

**Qualifications of Brian A. Janous**

1    **Q     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2    A     Brian A. Janous. My business address is 1215 Fern Ridge Parkway, Suite 208,  
3        St. Louis, Missouri 63141.

4    **Q     WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?**

5    A     I am a consultant in the field of public utility regulation with the firm of Brubaker &  
6        Associates, Inc. (BAI), energy, economic and regulatory consultants.

7    **Q     PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

8    A     I was graduated from the University of Missouri at Columbia in 2000 with a Bachelor  
9        of Science degree in Finance and Banking and a Bachelor of Arts degree in  
10       Philosophy. Upon graduation, I accepted a position with Brubaker & Associates, Inc.  
11       Since that time, I have participated in numerous rate and restructuring matters  
12       throughout the United States and Canada and I have testified on the appropriateness  
13       of utility capital structure and cost of capital before the Illinois Commerce Commission  
14       and the Public Service Commission of Wisconsin. I have also worked in several  
15       competitive markets to assist clients with the development of purchasing strategies. I  
16       am currently a Senior Consultant in the firm.

17                In May 2004, I completed a Master of Business Administration degree from  
18       Webster University.

19                The firm of Brubaker & Associates, Inc. provides consulting services in the  
20       field of energy procurement and public utility regulation to many clients including large  
21       industrial and institutional customers, some utilities and, on occasion, state regulatory

22 agencies. More specifically, we provide analysis of energy procurement options  
23 based on consideration of prices and reliability as related to the needs of the client,  
24 prepare rate, feasibility, economic and cost of service studies relating to energy and  
25 utility services, prepare depreciation and feasibility studies relating to utility service,  
26 assist in contract negotiations for utility services; and provide technical support to  
27 legislative activities.

28 In addition to our main office in St. Louis, the firm also has branch offices in  
29 Phoenix, Arizona and Corpus Christi, Texas.

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# Illinois-American Water Company

## Rate of Return at 9.9% ROE

<u>Line</u>	<u>Description</u>	<u>Amount</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	<u>Weighted</u> <u>Cost</u> (4)
1	Short-term Debt	\$ 15,032,370	2.28%	4.81%	0.11%
2	Long-term Debt	\$ 351,920,879	53.28%	5.91%	3.15%
3	Common Equity	<u>\$ 293,530,169</u>	<u>44.44%</u>	<b>9.90%</b>	<u>4.40%</u>
4	<b>Total</b>	<b>\$ 660,483,418</b>	<b>100.0%</b>		<b>7.66%</b>

Source:

Schedule D-1 First Revised, Page 1 of 6.

# Illinois-American Water Company

## Accuracy of Interest Rate Forecasts

### (Long-Term Treasury Bond Yields - Projected Vs. Actual)

Line	Date	Publication Data			Actual Yield in Projected Quarter	Projected Yield Higher (Lower) Than Actual Yield*	Actual Yields Differential**
		Actual Yield (1)	Projected Yield (2)	For Quarter (3)			
1	Dec-00	5.8%	5.8%	1Q, 02	5.6%	0.2%	0.2%
2	Mar-01	5.7%	5.6%	2Q, 02	5.8%	-0.2%	-0.1%
3	Jun-01	5.4%	5.8%	3Q, 02	5.2%	0.6%	0.2%
4	Sep-01	5.7%	5.9%	4Q, 02	5.1%	0.8%	0.6%
5	Dec-01	5.5%	5.7%	1Q, 03	4.9%	0.8%	0.6%
6	Mar-02	5.3%	5.9%	2Q, 03	4.7%	1.2%	0.6%
7	Jun-02	5.6%	6.2%	3Q, 03	5.2%	1.0%	0.4%
8	Sep-02	5.8%	5.9%	4Q, 03	5.2%	0.7%	0.6%
9	Dec-02	5.2%	5.7%	1Q, 04	4.9%	0.8%	0.3%
10	Mar-03	5.1%	5.7%	2Q, 04	5.4%	0.3%	-0.3%
11	Jun-03	5.0%	5.4%	3Q, 04	5.1%	0.3%	-0.1%
12	Sep-03	4.7%	5.8%	4Q, 04	4.9%	0.9%	-0.2%
13	Dec-03	5.2%	5.9%	1Q, 05	4.8%	1.1%	0.4%
14	Mar-04	5.2%	5.9%	2Q, 05	4.6%	1.3%	0.6%
15	Jun-04	4.9%	6.2%	3Q, 05	4.5%	1.7%	0.4%
16	Sep-04	5.4%	6.0%	4Q, 05	4.8%	1.2%	0.6%
17	Dec-04	5.1%	5.8%	1Q, 06	4.6%	1.2%	0.4%
18	Mar-05	4.9%	5.6%	2Q, 06	5.1%	0.5%	-0.3%
19	Jun-05	4.8%	5.5%	3Q, 06	5.0%	0.5%	-0.2%
20	Sep-05	4.6%	5.2%	4Q, 06	4.7%	0.5%	-0.2%
21	Dec-05	4.5%	5.3%	1Q, 07	4.8%	0.5%	-0.3%
22	Mar-06	4.8%	5.1%	2Q, 07	5.0%	0.1%	-0.2%
23	Jun-06	4.6%	5.3%	3Q, 07	4.9%	0.4%	-0.3%
24	Jul-06	5.1%	5.3%	4Q, 07			
25	Aug-06	5.1%	5.3%	4Q, 07			
26	Sep-06	5.1%	5.2%	4Q, 07			
27	Oct-06	5.0%	5.1%	1Q, 08			
28	Nov-06	5.0%	5.1%	1Q, 08			
29	Dec-06	5.0%	5.0%	1Q, 08			
30	Jan-07	4.7%	5.1%	2Q, 08			
31	Feb-07	4.7%	5.1%	2Q, 08			
32	Mar-07	4.7%	5.1%	2Q, 08			
33	Apr-07	4.8%	5.0%	3Q, 08			
34	May-07	4.8%	5.1%	3Q, 08			
35	Jun-07	4.8%	5.1%	3Q, 08			
36	Jul-07	5.0%	5.4%	4Q, 08			
37	Aug-07	5.0%	5.2%	4Q, 08			
38	Sep-07	5.0%	5.2%	4Q, 08			
39	Oct-07	4.9%	5.2%	1Q, 09			
40	Nov-07	4.9%	5.1%	1Q, 09			
41	Dec-07	4.9%	4.8%	1Q, 09			

Source:

Blue Chip Financial Forecasts, Various Dates.

\* Col. 2 - Col. 4.

\*\* Col. 1 - Col. 4.

# Illinois-American Water Company

## Water Comparable Group

<u>Line</u>	<u>Water Utility</u>	<u>Bond Ratings</u>		<u>Business</u>	<u>2006</u>	
		<u>S&amp;P<sup>1</sup></u>	<u>Moody's<sup>1</sup></u>	<u>Profile</u>	<u>Common Equity Ratios</u>	
		<u>(1)</u>	<u>(2)</u>	<u>Rating<sup>3</sup></u>	<u>Value Line<sup>2</sup></u>	<u>AUS</u>
				<u>(3)</u>	<u>(4)</u>	<u>(5)</u>
1	American States Water Co.	A-	A2	3	51%	50%
2	Aqua America, Inc	AA-	NR	2	48%	43%
3	California Water Service Group	NR	A2	3	56%	56%
4	Connecticut Water Services	AAA	NR	3	56%	54%
5	Middlesex Water Company	A	NR	3	49%	48%
6	SJW Corporation	NR	NR	N/A	54%	55%
7	Southwest Water Company	NR	NR	N/A	56%	54%
8	York Water Company	A-	NR	2	52%	50%
9	<b>Average</b>	<b>A</b>	<b>A2</b>	<b>3</b>	<b>53%</b>	<b>51%</b>
10	Illinois-American Water Company					
11	American Water Capital, Inc.	A-	Baa1	2	44% <sup>4</sup>	

Sources:

<sup>1</sup> AUS Utility Reports; May, 2007.

<sup>2</sup> The Value Line Investment Survey; October 26, 2007.

<sup>3</sup> U.S. Utilities and Power Ranking List, May 4, 2007.

<sup>4</sup> Schedule D-1 First Revised, Page 1 of 6.

# Illinois-American Water Company

## Gas Comparable Group

<u>Line</u>	<u>Gas Utility</u>	<u>Senior Secured Ratings</u>		<u>Business Profile Rating<sup>3</sup></u> (3)	<u>2006 Common Equity Ratios</u>	
		<u>S&amp;P<sup>1</sup></u> (1)	<u>Moody's<sup>1</sup></u> (2)		<u>Value Line<sup>2</sup></u> (4)	<u>AUS</u> (5)
1	AGL Resources	A-	A3	4	50%	43%
2	Atmos Energy	BBB	Baa3	4	43%	45%
3	Laclede Group	A	A3	3	50%	47%
4	New Jersey Resources	AA-	NR	2	65%	54%
5	Nicor, Inc.	AA	A1	3	64%	58%
6	Northwest Natural Gas	AA-	A2	1	54%	48%
7	Piedmont Natural Gas	A	A3	2	52%	48%
8	South Jersey Industries	A	Baa1	3	55%	48%
9	WGL Holdings, Inc.	AA-	A2	3	62%	59%
10	<b>Average</b>	<b>A</b>	<b>A3</b>	<b>3</b>	<b>55%</b>	<b>50%</b>
11	Illinois-American Water Company					
12	American Water Capital, Inc.	A-	Baa1	2	44% <sup>4</sup>	

Sources:

<sup>1</sup> AUS Utility Reports; May, 2007.

<sup>2</sup> The Value Line Investment Survey; October 26, 2007.

<sup>3</sup> U.S. Utilities and Power Ranking List, May 4, 2007.

<sup>4</sup> Schedule D-1 First Revised, Page 1 of 6.

# Illinois-American Water Company

## Growth Rate Estimates (Water)

<u>Line</u>	<u>Water Utility</u>	<u>Zacks Estimated Growth %<sup>1</sup></u> (1)	<u>Zacks Number of Estimates<sup>1</sup></u> (2)	<u>Reuters Estimated Growth %<sup>2</sup></u> (3)	<u>Reuters Number of Estimates<sup>2</sup></u> (4)	<u>SNL Estimated Growth %<sup>3</sup></u> (5)	<u>SNL Number of Estimates<sup>3</sup></u> (6)	<u>AVG of Growth Rates</u> (7)
1	American States Water Co.	N/A	N/A	4.00%	1	N/A	N/A	4.00%
2	Aqua America, Inc	11.00%	4	10.75%	4	N/A	N/A	10.88%
3	California Water Service Group	8.00%	5	7.67%	3	N/A	N/A	7.84%
4	Connecticut Water Services	N/A	N/A	15.00%	1	N/A	N/A	15.00%
5	Middlesex Water Company	8.00%	2	N/A	N/A	N/A	N/A	8.00%
6	SJW Corporation	10.00%	1	N/A	N/A	N/A	N/A	10.00%
7	Southwest Water Company	11.00%	2	12.50%	2	N/A	N/A	11.75%
8	York Water Company	11.33%	3	7.00%	1	N/A	N/A	9.17%
9	<b>Average</b>	<b>9.89%</b>	<b>3</b>	<b>9.49%</b>	<b>2</b>	<b>N/A</b>	<b>N/A</b>	<b>9.58%</b>

Sources:

<sup>1</sup> www.zacksadvisor.com, Detailed Research downloaded on January 2, 2008.

<sup>2</sup> www.investor.reuters.com, Earnings Estimates downloaded on January 2, 2008.

<sup>3</sup> http://www.snl.com Longterm Growth Rate Estimates downloaded on January 2, 2008.

# Illinois-American Water Company

## Growth Rate Estimates (Gas)

<u>Line</u>	<u>Gas Utility</u>	<u>Zacks Estimated Growth %<sup>1</sup></u> (1)	<u>Zacks Number of Estimates<sup>1</sup></u> (2)	<u>Reuters Estimated Growth %<sup>2</sup></u> (3)	<u>Reuters Number of Estimates<sup>2</sup></u> (4)	<u>SNL Estimated Growth %<sup>3</sup></u> (5)	<u>SNL Number of Estimates<sup>3</sup></u> (6)	<u>AVG of Growth Rates</u> (7)
1	AGL Resources	4.75%	4	5.35%	4	6.00%	3	5.37%
2	Atmos Energy	5.20%	5	5.25%	6	5.30%	4	5.25%
3	Laclede Group	N/A	N/A	N/A	N/A	5.00%	1	5.00%
4	New Jersey Resources	6.00%	2	5.00%	3	6.00%	2	5.67%
5	Nicor, Inc.	4.00%	1	4.00%	2	2.50%	2	3.50%
6	Northwest Natural Gas	5.25%	4	5.33%	3	5.00%	3	5.19%
7	Piedmont Natural Gas	5.67%	3	5.23%	4	5.50%	2	5.47%
8	South Jersey Industries	7.50%	2	6.50%	2	7.00%	3	7.00%
9	WGL Holdings, Inc.	4.00%	1	4.00%	1	4.00%	1	4.00%
10	<b>Average</b>	<b>5.30%</b>	<b>3</b>	<b>5.08%</b>	<b>3</b>	<b>5.14%</b>	<b>2</b>	<b>5.16%</b>

Sources:

<sup>1</sup> www.zacksadvisor.com, Detailed Research downloaded on January 2, 2008.

<sup>2</sup> www.investor.reuters.com, Earnings Estimates downloaded on January 2, 2008.

<sup>3</sup> http://www.snل.com Longterm Growth Rate Estimates downloaded on January 2, 2008.

# Illinois-American Water Company

## Constant Growth DCF Model (Water)

<u>Line</u>	<u>Water Utility</u>	<u>13-Week AVG Stock Price<sup>1</sup></u> (1)	<u>AVG (%) Growth</u>	<u>Annual Dividend<sup>2</sup></u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	American States Water Co.	\$ 42.24	4.00%	\$ 0.94	2.31%	6.31%
2	Aqua America, Inc	\$ 22.44	10.88%	\$ 0.50	2.47%	13.35%
3	California Water Service Group	\$ 39.99	7.84%	\$ 1.16	3.13%	10.96%
4	Connecticut Water Services	\$ 24.11	15.00%	\$ 0.87	4.16%	19.16%
5	Middlesex Water Company	\$ 18.79	8.00%	\$ 0.69	3.98%	11.98%
6	SJW Corporation	\$ 34.49	10.00%	\$ 0.60	1.93%	11.93%
7	Southwest Water Company	\$ 12.35	11.75%	\$ 0.23	2.10%	13.85%
8	York Water Company	\$ 16.34	9.17%	\$ 0.47	3.15%	12.32%
9	<b>Average</b>	<b>\$ 26.34</b>	<b>9.58%</b>	<b>\$ 0.68</b>	<b>2.90%</b>	<b>12.5%</b>

Sources:

<sup>1</sup> <http://moneycentral.msn.com>, downloaded on May 10, 2007.

<sup>2</sup> The Value Line Investment Survey; October 26, 2007.

# Illinois-American Water Company

## Constant Growth DCF Model (Gas)

<u>Line</u>	<u>Gas Utility</u>	<u>13-Week AVG Stock Price</u> <sup>1</sup> (1)	<u>AVG (%) Growth</u> (2)	<u>Annual Dividend</u> <sup>2</sup> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	AGL Resources	\$ 37.96	5.37%	\$ 1.64	4.55%	9.92%
2	Atmos Energy	\$ 27.68	5.25%	\$ 1.30	4.94%	10.19%
3	Laclede Group	\$ 33.94	5.00%	\$ 1.46	4.52%	9.52%
4	New Jersey Resources	\$ 49.33	5.67%	\$ 1.52	3.26%	8.92%
5	Nicor, Inc.	\$ 42.72	3.50%	\$ 1.86	4.51%	8.01%
6	Northwest Natural Gas	\$ 47.85	5.19%	\$ 1.50	3.30%	8.49%
7	Piedmont Natural Gas	\$ 25.90	5.47%	\$ 1.00	4.07%	9.54%
8	South Jersey Industries	\$ 36.68	7.00%	\$ 0.98	2.86%	9.86%
9	WGL Holdings, Inc.	\$ 33.36	4.00%	\$ 1.36	4.24%	8.24%
10	<b>Average</b>	<b>\$ 37.27</b>	<b>5.16%</b>	<b>\$ 1.40</b>	<b>4.03%</b>	<b>9.2%</b>

Sources:

<sup>1</sup> <http://moneycentral.msn.com>, downloaded on January 2, 2008.

<sup>2</sup> The Value Line Investment Survey; December 14, 2007.

# Illinois-American Water Company

## GDP and Dividend Growth Rates (Water)

<u>Line</u>	<u>Water Utility</u>	<u>Dividend Growth</u>			<u>Inflation (CPI)*</u>			<u>Nominal GDP*</u>	
		<u>Past 5 Years<sup>1</sup></u> (1)	<u>Past 10 Years<sup>1</sup></u> (2)	<u>3-5 Years Projection<sup>1</sup></u> (3)	<u>Past 5 Years<sup>2</sup></u> (4)	<u>Past 10 Years<sup>2</sup></u> (5)	<u>3-5 Years Projection<sup>2</sup></u> (6)	<u>Past 5 Years<sup>1</sup></u> (7)	<u>Past 10 Years<sup>1</sup></u> (8)
1	American States Water Co.	1.0%	1.0%	3.5%					
2	Aqua America, Inc	7.0%	6.5%	9.5%					
3	California Water Service Group	0.5%	1.0%	1.0%					
4	Connecticut Water Services	1.0%	N/A	N/A					
5	Middlesex Water Company	2.0%	N/A	N/A					
6	SJW Corporation	5.5%	N/A	N/A					
7	Southwest Water Company	9.0%	9.0%	9.5%					
8	York Water Company	-3.0%	N/A	N/A					
9	<b>Average</b>	<b>2.9%</b>	<b>4.4%</b>	<b>5.9%</b>	<b>2.6%</b>	<b>2.5%</b>	<b>2.2%</b>	<b>5.0%</b>	<b>5.4%</b>

Sources:

<sup>1</sup> The Value Line Investment Survey; May 12, June 2, June 30, 2006.

<sup>2</sup> The Value Line Investment Survey; October 26, 2007.

# Illinois-American Water Company

## GDP and Dividend Growth Rates (Gas)

<u>Line</u>	<u>Gas Utility</u>	<u>Dividend Growth</u>			<u>Inflation (CPI)*</u>			<u>Nominal GDP*</u>	
		<u>Past 5 Years<sup>1</sup></u> (1)	<u>Past 10 Years<sup>1</sup></u> (2)	<u>3-5 Years Projection<sup>1</sup></u> (3)	<u>Past 5 Years<sup>2</sup></u> (4)	<u>Past 10 Years<sup>2</sup></u> (5)	<u>3-5 Years Projection<sup>2</sup></u> (6)	<u>Past 5 Years<sup>1</sup></u> (7)	<u>Past 10 Years<sup>1</sup></u> (8)
1	AGL Resources	4.0%	2.5%	5.5%					
2	Atmos Energy	2.0%	3.0%	1.5%					
3	Laclede Group	0.5%	1.0%	2.5%					
4	New Jersey Resources	3.5%	3.0%	5.0%					
5	Nicor, Inc.	2.5%	4.0%	N/A					
6	Northwest Natural Gas	1.5%	1.0%	5.5%					
7	Piedmont Natural Gas	5.0%	5.5%	4.5%					
8	South Jersey Industries	3.5%	2.0%	5.5%					
9	WGL Holdings, Inc.	1.5%	1.5%	2.5%					
10	<b>Average</b>	<b>2.7%</b>	<b>2.6%</b>	<b>4.1%</b>	<b>2.6%</b>	<b>2.5%</b>	<b>2.2%</b>	<b>5.0%</b>	<b>5.4%</b>

Sources:

<sup>1</sup> The Value Line Investment Survey; May 12, June 2, June 30, 2006.

<sup>2</sup> The Value Line Investment Survey; March 16, 2007.

# Illinois-American Water Company

## Two-Stage Growth DCF Model (Water)

<u>Line</u>	<u>Water Utility</u>	<u>13-Week AVG Stock Price<sup>1</sup></u> (1)	<u>AVG (%) Growth</u>	<u>GDP Growth<sup>3</sup></u> (3)	<u>Annual Dividend<sup>2</sup></u> (4)	<u>Two-Stage Growth DCF</u> (5)
1	American States Water Co.	\$ 42.24	4.00%	5.00%	\$ 0.94	7.20%
2	Aqua America, Inc	\$ 22.44	10.88%	5.00%	\$ 0.50	8.02%
3	California Water Service Group	\$ 39.99	7.84%	5.00%	\$ 1.16	8.45%
4	Connecticut Water Services	\$ 24.11	15.00%	5.00%	\$ 0.87	10.75%
5	Middlesex Water Company	\$ 18.79	8.00%	5.00%	\$ 0.69	9.40%
6	SJW Corporation	\$ 34.49	10.00%	5.00%	\$ 0.60	7.27%
7	Southwest Water Company	\$ 12.35	11.75%	5.00%	\$ 0.23	7.64%
8	York Water Company	\$ 16.34	9.17%	5.00%	\$ 0.47	8.64%
9	<b>Average</b>	<b>\$ 26.34</b>	<b>9.58%</b>	<b>5.00%</b>	<b>\$ 0.68</b>	<b>8.4%</b>

Sources:

<sup>1</sup> <http://moneycentral.msn.com>, downloaded on January 2, 2008.

<sup>2</sup> The Value Line Investment Survey; October 26, 2007.

<sup>3</sup> Blue Chip Economic Indicators; October 10, 2007.

# Illinois-American Water Company

## Two-Stage Growth DCF Model (Gas)

<u>Line</u>	<u>Gas Utility</u>	<u>13-Week AVG Stock Price<sup>1</sup></u> (1)	<u>AVG (%) Growth</u>	<u>GDP Growth<sup>3</sup></u> (3)	<u>Annual Dividend<sup>2</sup></u> (4)	<u>Two-Stage Growth DCF</u> (5)
1	AGL Resources	\$ 37.96	5.37%	5.00%	\$ 1.64	9.61%
2	Atmos Energy	\$ 27.68	5.25%	5.00%	\$ 1.30	9.98%
3	Laclede Group	\$ 33.94	5.00%	5.00%	\$ 1.46	9.52%
4	New Jersey Resources	\$ 49.33	5.67%	5.00%	\$ 1.52	8.33%
5	Nicor, Inc.	\$ 42.72	3.50%	5.00%	\$ 1.86	9.28%
6	Northwest Natural Gas	\$ 47.85	5.19%	5.00%	\$ 1.50	8.31%
7	Piedmont Natural Gas	\$ 25.90	5.47%	5.00%	\$ 1.00	9.14%
8	South Jersey Industries	\$ 36.68	7.00%	5.00%	\$ 0.98	8.06%
9	WGL Holdings, Inc.	\$ 33.36	4.00%	5.00%	\$ 1.36	9.09%
10	<b>Average</b>	<b>\$ 37.27</b>	<b>5.16%</b>	<b>5.00%</b>	<b>\$ 1.40</b>	<b>9.0%</b>

Sources:

<sup>1</sup> <http://moneycentral.msn.com>, downloaded on January 2, 2008.

<sup>2</sup> The Value Line Investment Survey; December 14, 2007.

<sup>3</sup> Blue Chip Economic Indicators; October 10, 2007.

# Illinois-American Water Company

## Comparable Group Beta (Water)

<u>Line</u>	<u>Water Utility</u>	<u>2003</u> (1)	<u>2004</u> (2)	<u>2005</u> (3)	<u>2006</u> (4)	<u>2007</u> (5)	<u>5-Yr. AVG</u> (6)
1	American States Water Co.	0.65	0.70	0.70	0.80	0.90	0.75
2	Aqua America, Inc	0.70	0.75	0.80	0.85	0.85	0.79
3	California Water Service Group	0.60	0.70	0.75	0.85	0.95	0.77
4	Connecticut Water Services	0.60	0.65	0.70	0.85	0.85	0.73
5	Middlesex Water Company	0.55	0.60	0.70	0.80	0.80	0.69
6	SJW Corporation	0.50	0.55	0.60	0.75	0.85	0.65
7	Southwest Water Company	0.60	0.65	0.65	0.80	0.90	0.72
8	York Water Company	0.50	0.55	0.50	0.50	0.55	0.52
9	<b>Average</b>	<b>0.59</b>	<b>0.64</b>	<b>0.68</b>	<b>0.78</b>	<b>0.83</b>	<b>0.70</b>
10	<b>Median</b>	<b>0.60</b>	<b>0.65</b>	<b>0.70</b>	<b>0.80</b>	<b>0.85</b>	<b>0.73</b>

Source:

The Value Line Investment Survey; October 26, 2007.

# Illinois-American Water Company

## Comparable Group Beta (Gas)

<u>Line</u>	<u>Gas Utility</u>	<u>2003</u> (1)	<u>2004</u> (2)	<u>2005</u> (3)	<u>2006</u> (4)	<u>2007</u> (5)	<u>5-Yr. AVG</u> (6)
1	AGL Resources	0.75	0.80	0.85	0.95	0.85	0.84
2	Atmos Energy	0.65	0.65	0.70	0.75	0.85	0.72
3	Laclede Group	0.65	0.70	0.75	0.85	0.95	0.78
4	New Jersey Resources	0.65	0.70	0.75	0.80	0.85	0.75
5	Nicor, Inc.	0.95	1.00	1.10	1.20	1.00	1.05
6	Northwest Natural Gas	0.60	0.65	0.70	0.75	0.90	0.72
7	Piedmont Natural Gas	0.70	0.75	0.75	0.80	0.85	0.77
8	South Jersey Industries	0.50	0.55	0.60	0.70	0.85	0.64
9	WGL Holdings, Inc.	0.65	0.75	0.80	0.80	0.85	0.77
10	<b>Average</b>	<b>0.68</b>	<b>0.73</b>	<b>0.78</b>	<b>0.84</b>	<b>0.88</b>	<b>0.78</b>
11	<b>Median</b>	<b>0.65</b>	<b>0.70</b>	<b>0.75</b>	<b>0.80</b>	<b>0.85</b>	<b>0.77</b>

Source:

The Value Line Investment Survey; December 14, 2007.

# Illinois-American Water Company

## CAPM Return Estimate

<u>Line</u>	<u>Description</u>	<u>Historical Premium (1)</u>
1	Risk Free Rate <sup>1</sup>	4.8%
2	Risk Premium <sup>2</sup>	6.5%
3	Beta <sup>3</sup>	0.85
4	CAPM	10.3%

<u>Line</u>	<u>Description</u>	<u>Prospective Premium (1)</u>
5	Risk Free Rate <sup>1</sup>	4.8%
6	Risk Premium <sup>2</sup>	6.8%
7	Beta <sup>3</sup>	0.85
8	CAPM	10.6%
9	<b>CAPM Average</b>	<b>10.5%</b>

Sources:

<sup>1</sup> Blue Chip Financial Forecasts; December 1, 2007 at 2.

<sup>2</sup> SBI; 2007 at pp. 31 & 120.

<sup>3</sup> The Value Line Investment Survey; November 9, November 30, December 28, 2007.

# Illinois-American Water Company

## S&P Credit Rating Financial Ratios at ROE of 9.9%

<u>Line</u>	<u>Description</u>	<u>Ratio at 9.9% Equity Return</u> (1)	<u>S&amp;P "AA" Rating (BP: 2) Benchmark*</u> (2)	<u>S&amp;P "A" Rating (BP: 2) Benchmark*</u> (3)	<u>Reference</u> (4)
1	Rate Base	\$ 549,796,183			Schedule C-1, Page 1 of 8.
2	Weighted Common Return	4.40%			Appendix B-1, Line 3, Col. 4.
3	Income to Common	\$ 24,189,547			Line 1 x Line 2.
4	Depreciation & Amortization	\$ 25,760,480			Schedule C-1, Page 1 of 8 - \$5.79 million**.
5	Deferred Income Tax	\$ 1,457,885			Schedule C-2, Page 2 of 16.
6	Funds from Operations (FFO)	\$ 51,407,912			Sum of Line 3 through Line 5.
7	Weighted Interest Rate	3.26%			Appendix B-1, Line 1 + Line 2, Col. 4.
8	Interest Expense	\$ 17,914,883			Line 1 x Line 7.
9	FFO Plus Interest	\$ 69,322,795			Line 6 + Line 8.
10	FFO Interest Coverage	3.9x	<b>4.0x - 3.0x</b>	3.0x - 2.0x	Line 9 / Line 8.
11	Total Debt Ratio	56%	45% - 52%	<b>52% - 58%</b>	Appendix B-1, Line 1 + Line 2, Col. 2.
12	FFO to Total Debt	17%	25% - 20%	<b>20% - 12%</b>	Line 6 / (Line 1 x Line 11).

Source:

\* Standard and Poors. New Business Profile Scores Assigned to U.S. Utility and Power Companies; Financial Guidelines Revised; June 2, 2004.

\*\* Includes the depreciation adjustment of IIRC witness Jim Collins.