

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

ILLINOIS POWER COMPANY)
AMEREN CORPORATION) **Docket No. 04-0476**
)
Proposed General Increase in)
Gas Rates)

**DIRECT TESTIMONY OF CHRISTOPHER C. THOMAS
ON BEHALF OF THE CITIZENS UTILITY BOARD**

CUB Exhibit 1.0

November 5, 2004

ILLINOIS POWER COMPANY
ICC DOCKET NO. 04-0476
TESTIMONY OF CHRISTOPHER C. THOMAS
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1 **I. STATEMENT OF QUALIFICATIONS**

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

3 A. My name is Christopher C. Thomas. My business address is 208 S. LaSalle Street,
4 Suite 1760, Chicago, Illinois 60604-1003.

5 **Q. WHAT IS YOUR PRESENT OCCUPATION?**

6 A. I am employed by the Citizens Utility Board (CUB) as Senior Policy Analyst.

7 **Q. PLEASE SUMMARIZE YOUR PROFESSIONAL EXPERIENCE.**

8 A. My professional career includes over four years as a utility regulatory economist. I
9 started my career as a regulatory economist in the Telecommunications Department of
10 The Missouri Public Service Commission (MoPSC). While with the MoPSC, I filed
11 testimony or affidavits in 11 different dockets. Schedule 1 attached to this testimony is
12 a list of the dockets in which I filed testimony and a brief description of the nature of
13 the docket. I became a CUB employee in September 2004.

14 **Q. DO YOU HAVE ANY EXPERIENCE WITH RATE OF RETURN AND
15 CAPITAL BUDGETING WITHIN A REGULATORY FRAMEWORK?**

16 A. I have analyzed multiple filings related to capital cost and rate of return, and have filed
17 testimony related to the appropriate forward looking cost of capital for use in a Total
18 Element Long Run Incremental Cost (TELRIC) study conducted pursuant to the
19 Federal Telecommunications Act. This testimony was filed in Missouri Public Service
20 Commission Docket No TO-2001-455 and ultimately the Commission accepted my
21 recommendation by ordering the parties to utilize existing Unbundled Network
22 Element (UNE) rates in their interconnection agreement. In addition to the filed
23 testimony, I have worked with consultants in preparing testimony on cost of capital

24 issues. For the purposes of this proceeding, I have reviewed the Commission’s rate of
 25 return determinations in virtually every gas rate case for the past twenty years.

26 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

27 A. I have a Bachelor's degree in Business Administration with a concentration in
 28 Finance and a minor in Economics from Truman State University in Missouri and a
 29 Master’s degree in Economics and Finance from Southern Illinois University
 30 Edwardsville.

31

32 **II. PURPOSE OF TESTIMONY**

33 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

34 A. The purpose of my testimony is to address the appropriate fair rate of return for
 35 Illinois Power Company’s (IP’s) gas distribution operations. This testimony
 36 addresses IP’s capital structure, the appropriate return on outstanding long-term
 37 debt, and the appropriate return on equity for IP’s gas distribution operations. I
 38 have reviewed IP’s initial filing and discovery responses. I will specifically
 39 address the issues raised by IP Witnesses Daniel L. Mortland and Kathleen C.
 40 McShane.

41 My analysis demonstrates that:

- 42 • The appropriate capital structure for IP’s gas distribution operations is:

43

	<u>Capital</u>	<u>Ratio</u>
44 Long Term Debt	\$1,355,278,715	41.76%
45 TFTNs *	\$391,751,322	12.07%
46 Preferred Stock*	\$45,430,145	1.40%
47 Common Stock Equity	<u>\$1,453,224,789</u>	<u>44.77%</u>

48

49 \$3,245,684,971 100.00%
 50
 51

* From IP Exhibit 3.2

- 52 • The appropriate cost of equity for IP’s gas distribution operation is 9.82%
- 53 • The appropriate cost of IP’s outstanding long-term debt is 6.59%
- 54 • Overall, IP should be allowed the opportunity to earn an 8.16% rate of return on
- 55 its gas distribution operations.

	Capital	Ratio	Cost	Weighted cost
Long Term Debt	\$1,355,278,715	41.76%	6.59%	2.75%
TFTNs*	\$391,751,322	12.07%	7.77%	0.94%
Preferred Stock*	\$45,430,145	1.40%	5.05%	0.07%
Common Stock Equity	<u>\$1,453,224,789</u>	<u>44.77%</u>	<u>9.82%</u>	<u>4.40%</u>
	\$3,245,684,971			8.16%

56 * From IP Exhibit 3.2

57 Witness David Effron is also filing testimony on behalf of both CUB and
 58 the People of the State of Illinois represented by the Attorney General. Mr.
 59 Effron will be addressing IP’s rate base and recommends several modifications to
 60 IP’s proposal. The combined impact of the rate base and rate of return
 61 adjustments proposed by Mr. Effron and myself is a reduction of approximately
 62 \$23 million in IP’s revenue deficiency. This issue is addressed more fully in Mr.
 63 Effron’s testimony.

64 The calculation of the Company’s rate of return is based on issues that I
 65 discuss in this testimony. Since Staff and other intervenors have yet to file
 66 testimony, I have not reviewed the testimony of those witnesses in preparation of
 67 my testimony. Therefore, at this time, I cannot take a position on issues affecting
 68 rate of return that may be addressed in their testimony.

69

70 **III. CAPITAL STRUCTURE AND COST OF DEBT**

71 **Q. HAVE YOU REVIEWED THE CAPITAL STRUCTURE AND COST OF**
72 **DEBT PROPOSED BY IP WITNESS DANIEL L. MORTLAND (IP**
73 **EXHIBIT 3.1)?**

74 A. Yes. IP Witness Mortland proposes two different scenarios affecting cost of debt
75 and capital structure in his Direct Testimony. Theses scenarios differ in their
76 treatment of the 11.5% series bonds issued by IP in December 2002 and January
77 2003. The first scenario, which IP is recommending as the appropriate capital
78 structure and cost of debt, includes the full interest cost of the 11.5% series bonds
79 in the determination of the cost of debt. The second scenario assumes that the
80 bonds were not issued and that IP's ultimate parent company, Dynegey Inc., was
81 able to meet the financial obligations that necessitated the issuance of the 11.5%
82 series bonds.

83 **Q. FOR RATEMAKING PURPOSES, DOES EITHER SCENARIO TREAT**
84 **THE 11.5% SERIES BONDS APPROPRIATELY?**

85 A. No, they do not, for two reasons. First, ratepayers should not bear either the risk
86 of speculative activities, or the additional costs attributable to those activities.
87 Second, this Commission already has determined how these bonds should be
88 treated for ratemaking purposes.

89 **Q. PLEASE EXPLAIN WHY RATEPAYERS SHOULD NOT BEAR THE**
90 **BURDEN OF THE INCREASED RATE OF RETURN ATTRIBUTABLE**
91 **TO THE INTEREST COST OF THE 11.5% SERIES BONDS.**

92 A. In my opinion, captive ratepayers should never be forced to bear the risk of the
93 speculative activities engaged in by the affiliates of regulated companies. If the
94 unregulated affiliate of a regulated entity is engaging in speculative activities, the
95 risks of those activities should be borne by the shareholders of the company and
96 not by captive ratepayers. The Illinois legislature shares this opinion and has
97 codified it in Section 9-230 of the Public Utilities Act, as follows:

98 (220 ILCS 5/9-230) (from Ch. 111 2/3, par. 9-230)

99 Sec. 9-230. Rate of return; financial involvement with
100 nonutility or unregulated companies. In determining a
101 reasonable rate of return upon investment for any public
102 utility in any proceeding to establish rates or charges, the
103 Commission shall not include any (i) incremental risk, (ii)
104 increased cost of capital, or (iii) after May 31, 2003,
105 revenue or expense attributed to telephone directory
106 operations, which is the direct or indirect result of the
107 public utility's affiliation with unregulated or nonutility
108 companies.

109 (Source: P.A. 92-22, eff. 6-30-01.)
110

111 Since, as Mr. Mortland indicates in his testimony (IP Exhibit 3.1, page 11,
112 lines 237-239), the 11.5% series bonds were issued as a result of financial
113 difficulties experienced by IP's ultimate parent company, and including the
114 interest cost of these bonds in a rate of return calculation increases the cost of debt
115 (and ultimately the rate of return), it is clear that the unadjusted bonds should not
116 be included in any rate of return calculation.

117 **Q. PLEASE EXPLAIN HOW THE COMMISSION HAS PREVIOUSLY**
118 **ADDRESSED THE RATEMAKING TREATMENT FOR IP'S 11.5%**
119 **SERIES BONDS.**

120 A. As I mentioned earlier, this Commission already has reviewed IP's 11.5% Series
121 bonds and how they should be treated for ratemaking purposes. This was done in
122 Illinois Commerce Commission Docket No. 04-0294, the docket in which
123 Ameren's acquisition of IP was approved. The Commission's Final Order in
124 Docket No. 04-0294 issued September 22, 2004, states in section V.(10).(e):

125 For gas and electricity ratemaking purposes, IP's 11.5%
126 long-term debt series will be imputed to the cost of utility
127 bonds rated in the triple-B category (i.e., Baa/BBB) with
128 eight-year terms to maturity. This includes the current IP
129 gas rate case, Docket No. 04-0476, if the proposed
130 transaction in Docket No. 04-0294 is consummated before
131 the end of that rate case;
132

133 Thus, this Commission has already spoken on how the bonds should be
134 treated in IP's gas ratemaking proceeding. IP has not produced any evidence as to
135 why the Commission's decision issued slightly over a month ago should be
136 overturned.

137 **Q. HAVE YOU CONDUCTED AN ANALYSIS FOLLOWING THE**
138 **COMMISSION'S ORDER IN 04-0294 IMPUTING THE COST OF THE**
139 **BONDS?**

140 A. Yes, I have. Since the company did not conduct an analysis pursuant to the
141 Commission's directive, I imputed the 11.5% Series bonds to the cost of bonds
142 rated in the BBB category. Investors see these bonds as less risky, and therefore
143 require a smaller return on their investment, resulting in cheaper debt for IP.

144 **Q. PLEASE EXPLAIN THE RESULTS FROM SUCH IMPUTATION.**

145 A. I was unable to compile a sufficiently large sample of BBB rated utility bonds
146 with eight year terms to maturity; however, utilizing publicly available bond

147 market data, I found 66 BBB rated bonds with maturities between eight and nine
148 years, as shown in Schedule 2. The average Coupon of these bonds is 6.36%
149 (Std. Dev 1.16%) and the average current yield is 5.73% (Std. Dev. 0.71%).

150 Further, I identified two utility bonds within the sample. The first was
151 issued by AGL Capital Corporation, a wholly owned subsidiary of AGL
152 Resources, Inc., with a coupon rate of 4.45% and a current yield of 4.47%. AGL
153 Resources is one of the companies in IP Witness Kathleen McShane's sample of
154 companies with operations comparable to the operations of IP (discussed later in
155 my testimony). The second was issued with a coupon rate of 7.875% by
156 Centerpoint Energy Resources, a combined natural gas delivery and electricity
157 generation and delivery company. It has a current yield of 6.487%.

158 These two bonds seem to indicate a wide variance in the yield of BBB
159 rated utility bonds with over eight years to maturity, but of course, there is little
160 we can infer from the examination of only two bonds. Therefore, we must look to
161 the entire sample. In my opinion, it is reasonable to expect IP to issue bonds with
162 a yield higher than the average bond in the sample, given its relative financial
163 position. It is not unreasonable to expect hypothetical BBB-rated IP bonds with
164 eight years to maturity to yield 6.44%, which is one standard deviation above the
165 average current yield of the sample and consequently is near the current yield of
166 the Centerpoint Energy Resources bond. I've assumed that the bonds are issued
167 with no discount or premium, a 6.44% coupon rate, and the same issuance
168 expense as the current 11.5% series bonds.

169 The resulting changes to IP's capital structure and cost of debt are:

- 170 • An increase in retained earnings of \$41,597,687 to reflect savings in annual
- 171 interest cost and the lack of a discount at issuance compared to the 11.5%
- 172 Series bonds (Schedule 3).
- 173 • A cost of debt of 6.59% to reflect the savings in annual interest cost and the
- 174 lack of a discount/premium at issuance compared to the 11.5% series bonds
- 175 (Schedule 3).
- 176 • A capital structure (Schedule 4) of:

	<u>Capital</u>	<u>Ratio</u>
177 Long Term Debt	\$1,355,278,715	41.76%
178 TFTNs*	\$391,751,322	12.07%
179 Preferred Stock*	\$45,430,145	1.40%
180 Common Stock Equity	<u>\$1,453,224,789</u>	<u>44.77%</u>
181	\$3,245,684,971	100.00%

182 * From IP Exhibit 3.2

184 **Q. IS THE CAPITAL STRUCTURE YOU HAVE PROPOSED**

185 **REASONABLE?**

186 A. Yes, when the actual capital structure of IP’s Gas distribution operation

187 with my proposed modifications is compared against the capital structures of the

188 companies in the LDC sample described in the Direct Testimony of Kathleen

189 McShane, and discussed later in this testimony, the proportions of long term-debt

190 and common stock equity do not seem unreasonable. Additionally, the equity and

191 debt ratios are comparable to those adopted by the Commission in recent LDC

192 rate cases (03-0008 for AmerenCIPS and AmerenUE and 02-0837 for CILCO).

193 **IV. COST OF EQUITY**

194 **Q. HAVE YOU REVIEWED THE COST OF EQUITY PROPOSED BY IP**

195 **WITNESS KATHLEEN C. McSHANE (IP EXHIBIT 4.1)?**

196 A. Yes, I have. Ms. McShane utilizes a wide variety of estimation techniques, along
 197 with several excessive adjustments to arrive at her estimated cost of equity of
 198 11.5%. I have several criticisms of Ms. McShane's testimony that I will discuss
 199 in this testimony. I do agree with Ms. McShane in several respects and I will
 200 point out those areas of agreement as well in my testimony

201 **Q. HAVE YOU PERFORMED ANY ANALYSIS OF THE APPROPRIATE**
 202 **COST OF EQUITY FOR IP GAS OPERATIONS?**

203 A. I have. In addition to reviewing Ms. McShane's testimony and analysis, I
 204 performed an independent single-stage, or constant growth, discounted cash flow
 205 (DCF) analysis and four (4) different equity risk premium analyses using the
 206 capital asset pricing model (CAPM). The results of my analysis support a cost of
 207 equity of no more than 9.82%.

208 **IV. A. DISCOUNTED CASH FLOW ANALYSIS**

209 **Q. PLEASE DESCRIBE YOUR SINGLE-STAGE DCF ANALYSIS.**

210 A. I utilized the constant growth or Gordon DCF model. This model can be
 211 represented by the following equation:

$$k = D1/P0 + g$$

213 Where:

214 k = Investors required rate of return, or the cost of equity capital

215 D1/P0 = The expected dividend yield.

216 D1 = The expected dividend in next period

217 P0 = The security price this period

218 g = The expected sustainable growth rate

219 Essentially, within the DCF analytic framework, if growth is constant and
 220 the stock price, dividends, and earnings grow in proportion to one another, then a
 221 firms' cost of equity capital is the current expected dividend yield (D1/P0) added

222 to the expected sustainable growth rate (g). Embedded in the model are several
223 key assumptions used to simplify the analysis. These are:

- 224 1. A constant growth rate that is sustainable into the indefinite future;
- 225 2. A constant dividend payout ratio;
- 226 3. A stock price that grows proportionately to the growth rate.

227 These assumptions are built upon two fundamental financial principles.

228 First, the current market price of a financial asset, such as shares of common
229 equity, is equal to all of the future cash flows an investor will expect to receive
230 from the asset, discounted back to the present value at the investors' required rate
231 of return. Therefore, investors' required rate of return is the rate at which the
232 present value of all future cash flows from an asset are equivalent to the current
233 market price of the asset. It is important to recognize that all cash flows to the
234 investor come from either future dividends or the sale of the security (at loss of all
235 future dividends). The second basic financial principle is the time value of
236 money. In its most basic form, this is the theory that a dollar received today is
237 more valuable than a dollar received at some point in the future. The present
238 value of a dollar received in the future is lower in order to recognize the return
239 that an investor could receive in future periods for the same dollar invested today.
240 This return is the investors required rate of return.

241 When I began my analysis I had the opportunity to review the analysis
242 completed by IP Witness McShane. Through this review, I was able to identify
243 several points of agreement with her analysis.

244 **Q. PLEASE IDENTIFY THE POINTS OF AGREEMENT BETWEEN YOUR**
245 **ANALYSIS AND THE TESTIMONY PROVIDED BY IP WITNESS**
246 **McSHANE.**

247 A. Since IP's gas operations are not publicly traded, in order to perform an effective
248 DCF analysis, it is necessary to identify a group of proxy firms with
249 characteristics similar to those of IP's Gas Operations. The selection criterion
250 enumerated in Section IV.B.2 of Ms. McShane's testimony are reasonable in my
251 estimation. The companies identified under these criteria should reasonably
252 approximate the risk characteristics of IP's gas operations. Therefore, I have
253 utilized the same sample of eight local distribution companies (LDCs) in my DCF
254 analysis.

255 Typically the determination of an appropriate constant growth rate is
256 contentious, to say the least. However, in this instance IP has proposed a
257 reasonable approach for determining the sustainable growth rate. Utilizing
258 consensus long-term earnings growth estimates compiled by The Institutional
259 Brokers Estimates System within Thompson Financial (I/B/E/S) is a reasonable
260 technique for estimating an appropriate sustainable growth rate. Such consensus
261 estimates reflect the aggregate opinions of analysts. These analysts are the same
262 analysts who are giving investment advice to actual investors, and presumably
263 these investors act upon this advice. Therefore, it should come as no surprise
264 that, as Ms. McShane notes, analysts' forecasts have been shown to be more
265 closely related to investors' expectations than historic growth. (IP Exhibit 4.3, pg
266 23, lines 687-690 and footnote 5) However, it is important to note that the

267 I/B/E/S estimates may indicate a higher rate of growth than will actually be
268 experienced in the future.

269 Analysts are inherently predicting a recovery component into their growth
270 rates. This is evidenced in, as Ms. McShane notes, the “numerous upward
271 revisions to the consensus estimates of real economic growth for 2004” (IP
272 Exhibit 4.1, pg 10, line 302-304). Essentially, analysts’ optimism about near term
273 recovery is factored into their estimates, and it is likely that real growth might not
274 approach such levels in the long term. However, this same issue is present in the
275 use of any growth rate forecasted under similar conditions. At this time, I’m not
276 proposing any specific adjustments to the I/B/E/S estimates.

277 **Q. THE FACT THAT YOU CONCUR WITH IP’S LDC SAMPLE**
278 **SELECTION CRITERION AND SUSTAINABLE GROWTH RATE**
279 **ESTIMATION LEAVES ONLY THE CURRENT STOCK PRICE AND**
280 **EXPECTED DIVIDEND AS AREAS OF DISAGREEMENT. WHAT**
281 **TECHNIQUE DID YOU USE TO ESTIMATE THESE VARIABLES?**

282 A. The current stock price and dividend are readily observable and differences in
283 estimation techniques result in minor variances in DCF analyses. As a matter of
284 completeness, I utilized the most current data I could at the time I wrote this
285 testimony. On October 27, 2004, I obtained and annualized the most current
286 dividend (issued between 7/27/04 and 10/27/04). Since we are assuming constant
287 growth, it was a relatively simple matter to project next period’s dividend by
288 increasing the current dividend to reflect the anticipated growth over the next
289 year.

290 I also found on October 27, 2004 the average high, low, and close stock
 291 prices for the three-month period between July 27, 2004 and October 27, 2004.
 292 Often there is a minor philosophical debate over what best approximates the
 293 actual average stock price. For completeness, I utilized two techniques to
 294 estimate the average stock price. I identified both the midpoint of the average
 295 high and low daily stock prices and the average daily closing stock price.

296 **Q. WHAT ARE THE RESULTS OF YOUR DCF ANALYSIS?**

297 A. The results of my analysis can be found in Schedule 5. My DCF analysis results
 298 in a mean required return on equity of 9.33% and a median required rate of return
 299 of 8.91% with a midpoint of 9.12%. This spread indicates that the analysis I have
 300 performed supports the unadjusted single-stage DCF findings made by Ms.
 301 McShane of 9.0% to 9.25% (IP exhibit 4.1, page 25, line 733).

302 **IV. B. CAPITAL ASSET PRICING MODEL**

303 **Q. PLEASE DESCRIBE YOUR CAPM ANALYSIS.**

304 A. Another analysis framework commonly utilized to estimate investors' required
 305 rate of return, or the cost of equity capital for the firm, is the CAPM. The CAPM
 306 can be represented by the following equation:

307
$$k = R_f + B(R_m - R_f)$$

308 Where;

309 k = Investors' required rate of return, or the cost of equity capital

310 R_f = The risk free rate

311 B = Beta, a representation of the degree of correlation between the
 312 market and the security or industry being analyzed

313 R_m = The market return

314 (R_m-R_f) = The market risk premium, or the market return in excess of the
 315 risk free rate.
 316

317 Essentially, within the CAPM framework, investors' required rate of
318 return is the risk free rate plus some proportion of the market risk premium
319 attributable to the security or industry being analyzed. The proportionate risk
320 attributable to an individual security of industry is estimated by beta. The key
321 assumption is therefore that beta is an accurate measure of the relative risk of an
322 individual security when compared with the overall market. It is also important to
323 note that the market return is assumed to be the average return attributable to the
324 entire marketplace of alternative investments one can make.

325 **Q. WHAT INPUTS DID YOU USE IN YOUR CAPM ANALYSIS?**

326 A. Once again, I reviewed Ms. McShane's CAPM analysis prior to performing my
327 own, and for completeness purposes, I utilized the most current information
328 available in my analysis.

329 Although the CAPM estimates the forward-looking cost of capital, beta is
330 calculated based upon the historic relationship between the market and the
331 security in question. In order to find the best estimate of beta, it is generally
332 preferable to observe multiple estimates. IP has proposed to use beta estimates
333 for the sample LDCs developed by Value Line (IP Exhibit 4.1, pg 44, line 1281-
334 1283). On October 25, 2004, I found publicly available beta estimates calculated
335 by Bloomberg and available on www.Bloomberg.com. Generally the Bloomberg
336 betas are within a reasonable range of the Value Line betas utilized by IP.
337 However, there are minor differences. Therefore, in order to find the best
338 estimate of each stock's true beta, I averaged the Value Line betas utilized by Ms.
339 McShane and the Bloomberg betas I obtained.

340 IP proposes to utilize a forecasted risk-free interest rate in the range of
341 5.25% - 5.5% (IP Exhibit 4.1, page 38, line 1114) with a midpoint of 5.375%.
342 Although IP's forecast methodology is an acceptable measure of the risk free
343 interest rate, to my knowledge it has not been shown to be a superior predictor of
344 the future interest rate. For completeness purposes, my analysis utilizes the
345 forecasted estimate proposed by IP and the average weekly estimates calculated
346 by the Federal Reserve for 90 day T-bills, 10 year T- notes, and 20 year T-notes
347 for the week ended October 22, 2004.

348 The determination of the market rate of return is also a backward looking
349 exercise. IP utilized the Ibbotson and Associates arithmetic mean as an estimate
350 of post WWII historic S&P 500 growth (IP Exhibit 4.1 Schedule 11). As of
351 November 1, 2004, the S&P 500 YTD return was 2.32%. Utilizing this figure and
352 the data provided in Attachment 5 to IP's Response to Staff Discovery Request JF
353 2.01, I updated the market risk estimate. Ultimately, based on the arithmetic
354 mean over the period from 1947 to November 1, 2004, the S&P 500 has earned an
355 average annual return of 13.1%.

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

357 A. I performed four different CAPM analyses utilizing each of the current indicators
358 of the risk free rate and the forecasted estimate proposed by IP.

359 The results of this analysis can be found in Schedule 6. My analysis
360 demonstrated a mean of 10.45% and a median of 10.38% with the inclusion of the
361 90-day T-bill and a mean of 10.67% and a median of 10.45% without the 90 day
362 T-bill. Overall, it is reasonable to conclude that the cost of equity capital

363 determined through the proper application of the CAPM is within the range of
364 10.38% and 10.67% with a midpoint of 10.53%.

365 **Q. WHAT IS YOUR RECOMMENDATION ON THE APPROPRIATE COST**
366 **OF EQUITY FOR IP'S GAS DISTRIBUTION OPERATIONS?**

367 A. Both the DCF and CAPM analysis frameworks are reasonable methods of
368 estimating the appropriate cost of equity capital. With this understanding it is
369 reasonable to find that the cost of equity capital for an LDC comparable to the
370 operations of IP's gas distribution operations is within the range of results
371 calculated by appropriate DCF and CAPM analyses. My analysis indicates that
372 the appropriate cost of equity capital is within the range of 9.12% - 10.53% with a
373 midpoint of 9.82%. Given the relative risk position of IP within the sample
374 (although the recent acquisition of IP by Ameren will certainly improve IP's risk
375 position) it is reasonable to conclude that the appropriate cost of equity capital for
376 IP's gas distribution operations should be set at not more than 9.82%.

377 **V. MARKET TO BOOK VALUE ADJUSTMENTS**

378 **Q. SEVERAL TIMES THROUGHOUT HER TESTIMONY, IP WITNESS**
379 **McSHANE THEORIZES THAT IT IS NECESSARY TO INCREASE THE**
380 **MARKET DERIVED COST OF EQUITY CAPITAL WHEN APPLYING**
381 **IT TO A COMPANY'S RATE BASE IN ORDER TO REFLECT THE**
382 **DIFFERENCE IN THE MARKET AND BOOK VALUES OF THE**
383 **EQUITY CAPITAL INVESTED BY COMMON EQUITY**
384 **SHAREHOLDERS. IS THIS A REASONABLE ADJUSTMENT?**

385 A. It is not. Ms. McShane and I disagree over the necessity of adjusting market-
386 derived returns on equity to reflect the difference in the market and book values of
387 the equity invested by the company's shareholders. Apparently Ms. McShane and
388 I view the purposes and goals of regulation quite differently. Therefore, it is very
389 important for the Commission to determine its goal in regulating LDCs, and to
390 ensure that the appropriate return on equity is firmly based upon these principles.

391 **Q. HOW DOES MS. McSHANE VIEW THE PURPOSES AND GOALS OF**
392 **REGULATION?**

393 A. According to her testimony, Ms. McShane focuses solely on her belief that the
394 objective of regulation is to simulate competition, or to establish a regulatory
395 framework, which will mimic the competitive model. (McShane Direct, IP
396 Exhibit 4.1, Pg. 17 lines 493-494). This is apparent, when on page 2 of her
397 testimony, lines 52-60, she quotes *Bluefield Water Works & Improvement Co. v.*
398 *Public Service Commission of West Virginia*, 262 U.S. 679, 692 (1923)
399 (Bluefield). Ms. McShane omits what I consider to be a very important part of
400 the section she quotes. In its entirety the section reads:

401 A public utility is entitled to such rates as will permit it to
402 earn a return on the value of the property it employs for the
403 convenience of the public equal to that generally being
404 made at the same time, and in the same region of the
405 country, on investments in other business undertakings
406 which are attended by corresponding risks and
407 uncertainties; *but it has no constitutional right to profits*
408 *such as are realized or anticipated in highly profitable*
409 *enterprises or speculative ventures.* (Emphasis added).
410

411 In omitting the italicized language, and throughout her testimony, Ms.
412 McShane focuses primarily on the idea that firms are competing with other firms

413 for capital in a competitive capital market. While this may be true, it is not the
414 only criteria upon which a fair rate of return should be based.

415 **Q. IN YOUR OPINION WHAT ARE THE CRITERION FOR**
416 **DETERMINING A FAIR RATE OF RETURN ON INVESTED EQUITY?**

417 A. There are two key decisions that have established the framework for determining
418 a fair rate of return on investment. The first is *Bluefield*, quoted above. The
419 second is the *Federal Power Commission et. al. v. Hope Natural Gas Co.*, 320
420 US. 591 (1944) (*Hope*). Together the *Hope* and *Bluefield* decisions establish
421 that:

- 422 1. A utility is entitled to a return equal to that generally being made at the same
423 time by business undertakings of similar risk;
- 424 2. A utility is entitled to a return reasonably sufficient to ensure financial
425 soundness and support existing credit, as well as to raise new capital;
- 426 3. A fair return can change along with economic conditions and capital markets;
427 and
- 428 4. *Hope* further clarifies that regulation provides an opportunity for, but not a
429 guarantee of utility profits.

430 In my opinion, the *Hope* and *Bluefield* decisions make it clear that the
431 courts do not support excessive utility profits at the expense of captive ratepayers.
432 This fundamental principle leads me to conclude that the objective of regulation is
433 not solely to emulate competition, which allows for sustainable profits in excess
434 of the cost of capital. Regulation provides utilities with a fair return on their
435 prudent and reasonable investment in exchange for providing service to
436 consumers at just and reasonable rates. As in the instant proceeding, utility
437 companies have the opportunity to request a rate increase whenever they consider
438 their returns to be insufficient.
439

440 While utilities may face competitive capital markets, it should be
441 universally understood that regulators are providing utility companies with the
442 opportunity to earn a fair rate of return on their invested capital. This is a very
443 clear distinction in the relative business risk of regulated utilities compared to
444 other firms competing for capital. Firms in competitive markets simply do not
445 have the ability to apply for a rate increase if they aren't able to maintain their
446 earnings at appropriate levels.

447 **Q. MS. McSHANE UTILIZES THE COMPARABLE EARNINGS TEST TO**
448 **REFLECT THE OPPORTUNITY COST OF INVESTED CAPITAL. DOES**
449 **THIS TEST REFLECT MARKET REALITY?**

450 A. In my opinion it does not. There is no basis for estimating the forward looking
451 return on common equity for a regulated utility by examining the historical
452 returns on common equity earned by competitive industrial firms. It is my
453 opinion that no rational investor would expect to receive returns on their
454 investment in a regulated LDC, such as IP, comparable to the returns they might
455 expect to receive from an investment in a competitive international business, such
456 as Wendy's International, which has an average 1993-2002 return on equity of
457 15% (IP Exhibit 4.3 schedule 14), or Clorox, Co., which has an average 1993-
458 2002 return on equity of 22.2% and forecasted 6/07-8/09 average return on equity
459 of 40%!!! (IP Exhibit 4.3 schedule 14)

460 It is my opinion that investors recognize that the business risk of regulated
461 LDCs is **significantly** lower than firms in a competitive environment and will
462 make their investment decisions appropriately. While competitive firms might

463 have financial risk similar to the financial risk of regulated companies their
464 business risk is much greater.

465 **Q. HAS IP PROPOSED ANY METHOD FOR COMPARING THE LOWER**
466 **BUSINESS RISK OF LDCs WITH THE HIGHER BUSINESS RISK OF**
467 **INDUSTRIAL FIRMS OPERATING IN COMPETITIVE**
468 **ENVIRONMENTS?**

469 A. Ms. McShane seems to insinuate that the lower business risk of LDCs can be
470 recognized by noting that the industrial firms in her sample have more equity
471 heavy capital structures, and that therefore the relative difference in the betas of
472 the LDC sample and her industrial sample can be utilized to estimate the risk
473 differential between the LDCs and the industrials.

474 This adjustment is unsubstantiated and should not be accepted by the
475 Commission. Financial and business risk are certainly two distinct characteristics
476 of the risk that investors speculate on when investing in a company. However,
477 both stockholders and bondholders assume some degree of financial and business
478 risk. Therefore, it is very difficult to distinguish between investors' expectations
479 of business and financial risk through an examination of the capital structures of
480 the sample firms. IP has presented no evidence on specifically how the
481 Commission might distinguish investors' expectations with respect to business
482 and financial risk and therefore the Commission should not recognize Ms.
483 McShane's proposed risk adjustment.

484 **Q. MS. McSHANE HAS PRESENTED EVIDENCE THAT INDICATES THAT**
485 **INVESTORS SEEM TO VALUE THEIR INVESTED CAPITAL AT**

486 **SIGNIFICANTLY GREATER THAN THE BOOK VALUE OF THOSE**
487 **INVESTMENTS. (IP EXHIBIT 4.1 SCHEDULE 5) DOES THIS**
488 **WARRANT AN ADJUSTMENT TO RECOGNIZE THE DISPARITY IN**
489 **THE MARKET AND BOOK VALUES OF STOCKHOLDER’S EQUITY**
490 **INVESTMENTS?**

491 A. No, it does not.

492 **Q. WHAT IS THE BASIS FOR YOUR OPINION?**

493 A. I have reviewed the most recent regulatory authority decisions for approximately
494 thirteen (13) of the regulated affiliates of the firms identified in Ms. McShane’s
495 LDC sample (shown on IP Exhibit 4.1 schedule 5). A summary of these results
496 can be found in Scheduled 7, attached to this testimony.

497 These regulated affiliates typically had returns on equity capital
498 established through traditional market based measures applied to their book value
499 rate base.

500 **Q. PLEASE EXPLAIN FURTHER.**

501 A. WGL Holdings, Inc. (WGL) is a good example. Ms. McShane identifies WGL as
502 having an average market to book ratio of 1.755 over the period between 1993
503 and 2003 (IP Exhibit 4.3, schedule 5). On November 2, 2004, I found a current
504 price to book ratio of approximately 1.58 from MSN Money
505 (moneycentral.msn.com), as calculated by Media General Financial Services. I
506 was able to find return on equity and rate of return determinations for all three of
507 the company’s regulated affiliates within the past 13 months.

508 As summarized in Schedule 7, WGL Holdings, Inc. has three separate
509 LDC affiliates operating under the name Washington Gas Light Co. in the District
510 of Columbia, Maryland, and Virginia. The three separate commissions
511 established returns on equity for WGL's subsidiaries at between 10.5% and
512 10.75%. The District of Columbia even explicitly rejected the idea of market to
513 book value adjustments as follows (District of Columbia Public Service
514 Commission, Opinion and Order, November 10, 1003):

515 60. We reject Witness Olson's market-to-book adjustment
516 for the same reasons we did so in Formal Case No. 989.
517 The Commission is not convinced by WGL's arguments
518 that investors require a return substantially above DCF-
519 based returns, because gas distribution companies' market
520 prices have been well above book value for more than 15
521 years. WGL recommends that the Commission allow a
522 return on common equity which is higher than its DCF-
523 based required return to support a level of prices between
524 those that would equal book value and the current level of
525 prices. The likely outcome of adopting such an approach
526 would be even higher prices, which then presumably would
527 need to be supported in the next rate case. During the last
528 15 years, WGL's rates have been set without including the
529 type of adjustment WGL recommends. Yet, according to
530 WGL, the Company's market-to-book ratio is 1.34 times.
531 The record in this proceeding does not support WGL's
532 prediction that, without such an adjustment, investors will
533 sell their stocks. Investors know that the returns allowed by
534 public service commissions are applied to book value/rate
535 base. An adjustment of the type Witness Olson
536 recommends would provide excessive returns to the
537 Company's shareholders at the expense of ratepayers.
538 [citations omitted]

539
540 All three WGL commission orders are public and relatively easy to obtain.
541 Certainly analysts and investors are aware of the authorized return on equity for
542 each affiliate, yet the market has still valued the company's equity at a level
543 significantly above the initial investment made by investors. This indicates a

544 clear disconnect between investors' expectations and Ms. McShane's
545 assumptions. In my opinion, investors are aware of the long-standing regulatory
546 practice of applying the market-derived rate of return on equity to the book value
547 of invested capital. Something else is driving investors expectations of the value
548 of their equity investment in WGL.

549 It is possible that these expectations are driven by WGL's other
550 operations, such as the company's energy-related retail businesses that focus on
551 energy marketing and commercial heating, ventilating and air conditioning
552 (HVAC) services (www.wglholdings.com). However, this in no way indicates
553 that the cost of equity capital I have calculated for IP's gas distribution operations
554 needs to be adjusted.

555 **Q. HAS THE COMMISSION ADDRESSED THE ISSUE OF APPLYING**
556 **MARKET TO BOOK VALUE ADJUSTMENTS TO MARKET DERIVED**
557 **COST OF EQUITY CAPITAL?**

558 Yes, it has. In the Commission's Order in the recent Central Illinois Public
559 Service Company, and Union Electric Company rate cases 02-0798(Cons.), 03-
560 0080, 03-0009 (CIPS and UE rate case) the Commission rejected Ms. McShane's
561 attempts to apply market to book adjustments stating:

562 [T]he Commission has a long history of applying its
563 estimated market required rate of return on common equity
564 to book value, net original cost rate base for Illinois
565 jurisdictional utilities, including CIPS and UE. There is no
566 evidence that this practice has ever served as an
567 impediment to a utilities ability to raise capital or maintain
568 its financial integrity.
569

570 Ms. McShane has not attempted to demonstrate that the application of the
571 estimated market required rate of return to book value, net original cost rate base
572 has served as an impediment to IP's ability to raise capital or maintain its
573 financial integrity, and therefore has presented no significant evidence
574 demonstrating that the Commission should modify its long-standing practice of
575 applying the estimated market required rate of return on common equity to book
576 value, net original cost rate base for Illinois jurisdictional utilities.

577 **Q. MS. McSHANE THEORIZES THAT THE "Q RATIO" IS AN**
578 **ACCEPTABLE MEANS OF ENSURING THAT THE RETURN ON**
579 **EQUITY IS COMPATABLE WITH THE RETURNS ACHIEVED IF THE**
580 **FORCE OF COMPETITION WERE DRIVING UTILITY PRICES. (IP**
581 **EXHIBIT 4.1, PG. 33, LINES 960-964) IS SHE CORRECT IN HER**
582 **ASSERTION?**

583 A. In theory, she is. However her argument suffers from several fundamental flaws.
584 James Tobin, 1981 Nobel Laureate in Economics, theorized that trends in capital
585 investment could be predicted by the ratio comparing the market value of an asset
586 to its replacement cost ("the Q Ratio"). IP assumes that inflation is the only force
587 driving the replacement value of LDC assets (IP Exhibit 4.1, page 30, lines 867-
588 868). In order for Tobin's theory of replacement costs to be applicable, an
589 appropriate analysis would have to simulate productivity gains along with
590 inflation.

591 Not only should productivity gains in IP's general operations be
592 considered, but within a competitive framework, companies are encouraged to

593 operate as efficiently as possible, and, therefore, any attempts to inflate the
594 investment that LDCs have made in plant should also approximate the
595 productivity gains that might have been made if competition, and not utility
596 regulation, were driving prices. Ms. McShane fails to do this and, therefore, the
597 Commission should disregard her adjustment based upon replacement costs, as it
598 does not approximate the returns achievable if the forces of competition were
599 driving utility prices.

600

601 **VI. OTHER ISSUES**

602 **Q. ARE THERE ANY OTHER ASSERTIONS MADE BY MS. McSHANE**
603 **THAT THE COMMISSION SHOULD DISREGARD?**

604 A. Yes, there are. Ms. McShane proposes a flotation cost to "...permit the company
605 to recover all costs associated with issuing additional stock....and will permit the
606 utility to maintain a market-to-book ratio in the range of 1.05-1.10" (IP Exhibit
607 4.1 lines 837-845). The Commission should reject this adjustment for two
608 reasons. First, the market to book ratio rational suffers from the same flaws I
609 have previously identified. Second, "[t]he Commission has traditionally approved
610 flotation cost adjustments only when the utility anticipates it will issue stock in
611 the test year or when it has been demonstrated that costs incurred prior to the test
612 year have not been recovered previously through rates." (Docket No. 03-0008).
613 IP has given no reason for the Commission to alter its long-standing practice with
614 respect to floatation costs.

615

616 **VII. SUMMARY**

617 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATION TO THE**
 618 **COMMISSION.**

619 A. While IP cautions the Commission that “[w]hen the return is set too low, the
 620 regulator is essentially encouraging ratepayers to over-consume a scarce
 621 resource;” (IP Exhibit 4.1, pg 33 lines 964-967), it is my opinion that the
 622 Commission need not concern itself with setting a high price for distribution
 623 services in the name of encouraging efficient consumption. The wholesale
 624 commodity market for natural gas is already encouraging efficiency and allowing
 625 IP to earn excessive profits will do nothing other than unnecessarily enrich
 626 shareholders at the expense of captive ratepayers, already the victim of high
 627 natural gas prices.

628 I recommend the Commission adopt the following as the appropriate fair
 629 rate of return for IP’s gas distribution operations:

- 630 • The appropriate capital structure for IP’s gas distribution operations is:

	<u>Capital</u>	<u>Ratio</u>
631 Long Term Debt	\$1,355,278,715	41.76%
632 TFTNs *	\$391,751,322	12.07%
633 Preferred Stock*	\$45,430,145	1.40%
634 Common Stock Equity	<u>\$1,453,224,789</u>	<u>44.77%</u>
635	\$3,245,684,971	100.00%
636		
637		

* From IP Exhibit 3.2

- 638 • The appropriate cost of equity for IP’s gas distribution operations is 9.82%
- 639 • The appropriate cost of IP’s outstanding long-term debt is 6.59%
- 640 • Overall, IP should be allowed the opportunity to earn not more than an
 641 8.16% rate of return for its gas distribution operations.

Capital	Ratio	Cost	Weighted cost
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Long Term Debt	\$1,355,278,715	41.76%	6.59%	2.75%
TFTNs*	\$391,751,322	12.07%	7.77%	0.94%
Preferred Stock*	\$45,430,145	1.40%	5.05%	0.07%
Common Stock Equity	<u>\$1,453,224,789</u>	<u>44.77%</u>	<u>9.82%</u>	<u>4.40%</u>
	\$3,245,684,971			8.16%

642

* From IP Exhibit 3.2

643

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

644

A. Yes, it does.