

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

NORTH SHORE GAS COMPANY)	
)	
Proposed general increase in natural gas)	Dkt. 09-0166
rates (Tariffs filed on February 25, 2009))	
)	
)	
THE PEOPLES GAS LIGHT AND COKE)	Dkt. 09-0167
COMPANY)	
)	(Consol.)
Proposed general increase in natural gas)	
rates (Tariffs filed on February 25, 2009))	

**REBUTTAL TESTIMONY OF CHRISTOPHER C. THOMAS
ON BEHALF OF THE CITIZENS UTILITY BOARD
AND THE CITY OF CHICAGO**

CUB-City Exhibit 4.0

August 4, 2009

**ICC DOCKET NOS. 09-0166/09-0167 (cons.)
REBUTTAL TESTIMONY OF CHRISTOPHER C. THOMAS**

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1 **I. INTRODUCTION AND PURPOSE OF TESTIMONY**

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

3 A. My name is Christopher C. Thomas. My business address is 309 W. Washington Street,
4 Suite 800, Chicago, IL 60606.

5
6 **Q. ARE YOU THE SAME CHRISTOPHER C. THOMAS WHO PRESENTED
7 DIRECT TESTIMONY IN THIS PROCEEDING?**

8 A. Yes.

9
10 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

11 A. The purpose of my rebuttal testimony is to respond to the rebuttal testimony of the
12 Peoples Gas Light and Coke Company (“Peoples”) and North Shore Gas Company
13 (“North Shore”) (together, the “Companies” or “Utilities”) witness Paul R. Moul. My
14 testimony also responds to issues raised in the testimony of the Companies witness
15 Bradley Johnson and Staff witnesses Michael McNally and Sheena Kight-Garlich.

16
17 **Q. PLEASE SUMMARIZE THE FINDINGS IN YOUR REBUTTAL TESTIMONY.**

18 A. The Commission should not be persuaded by the testimony presented by Mr. Moul. His
19 testimony in this proceeding relies largely on subjective opinion. He suggests that critical
20 inputs to the standard models require his subjective approval, and he continues to rely on
21 short-term subjective investor expectations as predictors of long-term sustainable growth.
22 I continue to support the analysis I performed in my direct testimony and recommend that
23 the Commission adopt the following weighted average cost of capital for Peoples and
24 North Shore.

Weighted Average Cost of Capital

With No Riders

PGL	Capital Structure*	Cost*	Weight
Short-term Debt	3.39%	0.92%	0.03%
Long-Term Debt	40.61%	5.27%	2.14%
Equity	56.00%	8.58%	4.80%
WACC			6.98%

NS	Amount*	Capital Structure	Cost*	Weight
Short-term Debt	\$ 10,452,167	5.86%	0.33%	0.02%
Long-Term Debt	\$ 72,476,045	40.60%	5.49%	2.23%
Equity	\$ 95,578,042	53.54%	8.58%	4.59%
Total	\$ 178,506,254	WACC		6.84%

With Riders VBA & UEA, and Stabilizing Changes in Rate Design

PGL	Capital Structure*	Cost*	Weight
Short-term Debt	3.39%	0.92%	0.03%
Long-Term Debt	40.61%	5.27%	2.14%
Equity	56.00%	8.255%	4.62%
WACC			6.79%

NS	Amount*	Capital Structure	Cost*	Weight
Short-term Debt	\$ 10,452,167	3.39%	0.33%	0.01%
Long-Term Debt	\$ 72,476,045	40.61%	5.49%	2.23%
Equity	\$ 95,578,042	56.00%	8.255%	4.62%
Total	\$ 178,506,254	WACC		6.86%

* Capital Structure, long-term debt costs, and short term debt costs from Staff Ex. 8.1

25

26

27

28 **Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.**

29 A. Discontinuity or turmoil in the credit markets creates uncertainty in expectations about
30 the future. This uncertainty, as CUB-City Witness Mr. Bodmer has described in more
31 detail, is based on the inability of existing valuation models to predict deep, broad-scale
32 declines in value, like the one that has recently occurred. Because of this, I have taken
33 account of the guidance provided by Mr. Bodmer as I performed a clear and supportable
34 return-on-equity analysis. The results of my analysis demonstrated that an 8.58% cost of
35 common equity provides investors with a fair return on their investment in the
36 Companies. I also used other supplemental checks to validate my results.

37

38 In addition, I recommended that if the Commission approves Rider UEA and rate design
39 changes that stabilize the Companies' revenues, it should take two actions:

40 1. Reduce the cost of equity determined for both Peoples and North Shore by 22.5
41 basis points (for a total reduction of 32.5 basis points including the effect of Rider
42 UEA, the stabilizing rate design changes, and the Commission's prior 10 point
43 reduction resulting from its approval of Rider VBA in the Companies' prior rate
44 cases); and

45 2. Approve a cost of equity that is at the low end of the range of reasonable
46 estimates. Furthermore, if the Commission approves Rider ICR, it should find
47 that the cost of capital for all investments made under Rider ICR is equivalent to
48 the Companies' cost of debt.

49

50 **Q. HAS THE TESTIMONY ON COST OF CAPITAL ISSUES IN THIS CASE**
51 **CAUSED YOU TO RECONSIDER ANY OF THE CONCLUSIONS YOU**
52 **PRESENTED IN YOUR DIRECT TESTIMONY?**
53

54 A. No. However, I have updated the capital structure and debt cost figures I presented in my
55 previous testimony to reflect the recommendations made by Staff witness Sheena Kight-
56 Garlisch. I have adopted Ms. Kight-Garlisch's recommended capital structure and debt
57 costs to isolate the impact that my cost of equity proposal has on the Companies' cost of
58 capital.

59

60 **II. RESPONSE TO MR. MOUL**

61 **Q. PLEASE SUMMARIZE YOUR RESPONSE TO MR. MOUL.**

62 A. Mr. Moul's rebuttal testimony relies on the same sort of subjectivity that can be found
63 throughout his direct testimony. He suggested that critical inputs to the standards models
64 require his subjective approval, and he continues to rely on short-term subjective investor
65 expectations as predictors of long-term sustainable growth.

66

67 **II. A. GENERAL ISSUES WITH MR. MOUL'S REBUTTAL TESTIMONY**

68 **Q. MR. MOUL ARGUED THAT THE FINANCIAL COMMUNITY WOULD BE**
69 **"EXTREMELY CONCERNED" IF THE COMMISSION SET THE COST OF**
70 **EQUITY AT THE LEVEL PROPOSED BY STAFF AND WOULD BE**
71 **"SHOCKED" IF THE COMMISSION ADOPTED YOUR RECOMMENDATION.**
72 **NS-PGL EX. PRM 2.0 AT 2, LL 33-35. ARE THESE STATEMENTS RELEVANT**
73 **TO THE COMMISSION'S DETERMINATION?**
74

75 A. No. Mr. Moul has provided no objective support for his statements, and the Commission
76 should not base its decision on such speculation. As Mr. Bodmer explains, Mr. Moul's
77 argument is simply a fear tactic presented to encourage the Commission to abandon
78 objectivity in determining the Companies' cost of equity and instead focus on short-term

79 subjective expectations. Mr. Moul’s preference for opinions over more objective market
80 indicators can be found throughout his testimony. Specifically:

- 81 • Mr. Moul inexplicably relied excessively on data from Value Line, while ignoring
82 comparable publicly available objective information.
- 83 • Mr. Moul argued that the short-term economic crisis has led investors to require
84 higher long-term returns today than they did just two or three years ago.
- 85 • Mr. Moul argued that utilities are somehow entitled to higher returns because they
86 must raise capital during all phases of the capital market cycle.
87

88 I refute these subjective judgments below.

89

90 **Q. HOW DID MR. MOUL RELY EXCESSIVELY ON INFORMATION FROM**
91 **VALUE LINE?**

92
93 A. Mr. Moul relied on Value Line to the exclusion of other available comparable
94 information. He argued that the true test of the relevance of Value Line rests on whether
95 it is read by investors when they analyze stocks, and that, in his view, Value Line is an
96 investor-influencing source of information. *See, e.g., id.* at 4, LL. 60-62. While Value
97 Line publications may be read by investors, the published information must be used
98 objectively, rather than simply assuming that Value Line’s data and forecasts represent
99 the market. Mr. Moul does not use the Value Line information in an objective way.

100

101 A reading of Mr. Moul’s testimony suggests that he is the sole arbiter of what
102 information investors review when they invest. Indeed, Mr. Moul criticizes Mr. McNally
103 for calculating betas independently of those issued by Value Line. Also, in defending his
104 exclusive reliance on Value Line data, Mr. Moul relies on his opinion of what investors
105 read to condemn the inclusion in one’s analysis of other objective information. “To
106 augment the Value Line betas with other information investors do not use is not

107 appropriate, regardless of the theoretical underpinnings of the modifications.” NS-PGL
 108 Ex. PRM 2.0 at 26, LL. 492-94.

109
 110 In defending his Value Line betas, Mr. Moul is implicitly arguing that investors don’t
 111 calculate their own beta estimates (as Staff has done), and they do not rely on betas
 112 calculated by sources other than Value Line. This is simply another example of Mr.
 113 Moul’s subjective bias. Evaluating the theoretical underpinnings of the models used to
 114 calculate the cost of equity capital is a critical undertaking. This is especially true given
 115 the uncertainty in the current financial environment.

116
 117 As shown in the chart below, some of the information from Value Line Mr. Moul used
 118 without modification or explanation is disproportionately higher than information from
 119 other publicly available sources.

Beta Estimates

	Value Line				
	Reported	Yahoo	Reuters	Google	Average
AGL	0.75	0.45	0.40	0.39	0.50
ATO	0.65	0.51	0.49	0.49	0.54
GAS	0.75	0.32	0.35	0.35	0.44
LG	0.60	-0.05	0.05	0.04	0.16
NJR	0.65	0.11	0.15	0.26	0.29
NWN	0.60	0.25	0.31	0.30	0.37
PNY	0.65	0.19	0.20	0.25	0.32
SJI	0.65	0.23	0.21	0.23	0.33
WGL	0.65	0.19	0.22	0.21	0.32
	0.66	0.24	0.26	0.28	0.36

120

121 Mr. Moul relies on only the reported Value Line betas, which have been adjusted for a
122 questionable mean reversion assumption and which are more than 1.8 times higher than
123 the average beta reported by publicly available sources. To be clear, my analysis does
124 use data from Value Line. However, I have balanced the information from Value Line
125 with other publicly available objective information.

126
127 Mr. Moul criticizes Staff's use of spot prices instead of a bigger sample of prices,
128 because single data points are more susceptible to "gamesmanship" and error from short-
129 term inefficiency. NS-PGL Ex. PRM 2.0 at 11, LL. 203-04. Mr. Moul did not heed his
130 own advice when he relied solely on Value Line betas, which resulted in a significant
131 overstatement of the Companies' cost of equity. Some might even consider ignoring
132 publicly available information in favor of information from one source "gamesmanship."

133

134 **Q. IN HIS REBUTTAL, MR. MOUL INCLUDED EXPECTED MARKET VALUE**
135 **RETURNS REPORTED BY VALUE LINE AS SUPPORT FOR HIS RETURN-**
136 **ON-EQUITY RECOMMENDATION. NS-PGL EX. PRM 2.0 AT 2-3, LL 44-51.**
137 **DO THESE RETURNS HAVE ANY RELEVENCE TO THIS PROCEEDING?**

138
139 A. No. The Commission must look at objective information instead of simply adopting
140 reports of investors' supposed expectations from a single source. As the testimony
141 presented by both Staff witness McNally and by me indicates, objectively determined
142 returns are significantly below the subjective expectations Mr. Moul used in performing
143 his analysis. If the Commission could reasonably rely on alleged investor expectations to
144 make the Commission's ultimate determination, the market cost of equity, then this entire
145 debate in regulatory proceedings would be moot. The Commission, as appears to be Mr.
146 Moul's preference, would simply plug in the Value Line numbers for the cost of equity

147 for the Companies and move on to the next issue. There would be no need to evaluate
148 the evidence or to determine what is a just and reasonable cost of equity. Of course, that
149 approach is not rational ratemaking policy or consistent with the standards that govern
150 ratemaking.

151

152 **Q. MR. MOUL ASSERTED THAT INVESTORS REQUIRE HIGHER RETURNS TO**
153 **ACCEPT RISK TODAY THAN THEY DID JUST TWO OR THREE YEARS**
154 **AGO. NS-PGL EX. PRM 2.0 AT 6, LL 109-11. HE ARGUED THAT THIS**
155 **MEANS THE COMMISSION CANNOT ACCEPT THE RECOMMENDATIONS**
156 **MADE BY YOU AND STAFF. DO YOU ARGEE?**

157

158 A. No. This argument further highlights the subjective bias inherent in Mr. Moul's logic and
159 analysis. Mr. Moul tries to obfuscate the connection between short-term and long-term
160 capital costs. Short-term variations in utility earnings, stock prices, and capital costs are
161 not new or unusual. A familiar example of such variation is the weather normalization of
162 billing units used in rate setting. Utilities experience the effects of fluctuations in
163 weather, capital market prices and costs, and operational expenses. However, the
164 Commission's task is to set rates that allow the utility to recover its costs, including the
165 cost of capital, over time. In a utility rate case the Commission does not determine the
166 cost of capital for a discrete time period. Rather, the Commission sets a long-term cost of
167 capital. Accordingly, the Commission's determination should not be influenced by
168 statements based on fear about the short-term financial outlook, when setting rates must
169 meet a long-term standard.

170

171

172

173 **Q. MR. MOUL ARGUED THAT UTILITIES ARE UNIQUELY EXPOSED TO THE**
174 **VOLATILITY OF THE EQUITY MARKETS BECAUSE THEY MUST**
175 **CONTINUE TO INVEST DURING TIMES OF BOTH FINANCIAL BOOM AND**
176 **FINANCIAL BUST. NS-PGL Ex. PRM 2.0 AT6, LL 113-116. IS THIS A VALID**
177 **ARGUMENT?**

178 A. No. Utility managers have been exposed to economic volatility for decades. This risk is
179
180 neither new nor unique to utilities. Recently, utilities have taken active steps to reduce
181 the risk of their business, as the Companies do in this case with their proposals for
182 various risk-reducing riders.

183
184 **II. B. CRITICISM OF MY DCF ANALYSIS**

185
186 **Q. HOW DID MR. MOUL CRITICISE YOUR DCF ANALYSIS?**

187
188 A. Mr. Moul criticizes my analysis in several ways. He takes issue with:

- 189
- my use of a non-constant growth DCF model;
 - 190 • the use of GDP growth as a steady state growth rate; and,
 - 191 • my testimony regarding the effect that a declining dividend payout ratio has
192 on DCF results.
- 193

194 **Q. MR. MOUL ARGUED THAT THE NON-CONSTANT GROWTH DCF MODEL**
195 **IS INNAPPROPRIATE TO USE WHEN CALCULATING THE RETURN ON**
196 **EQUITY FOR A PUBLIC UTILITY. NS-PGL Ex. PRM 2.0 at 16, LL 330-2. DO**
197 **YOU AGREE?**

198
199 A. No. Mr. Moul argued that the non-constant DCF approach is less objective because it
200 somehow “divorces” the DCF model from the analysis undertaken by investors when
201 forming their return expectations. NS-PGL Ex. PRM 2.0 at 16, LL 330-2. Mr. Moul’s
202 argument is an oversimplification of investor expectations and is completely subjective in
203 nature. The core of Mr. Moul’s supposition is his contention that investors rely so

204 heavily on growth rate expectations published by analysts that more complete analyses
205 (even if conducted by other analysts) do not have a significant effect.

206
207 Discontinuity or turmoil in the credit markets creates uncertainty in expectations about
208 the future. In the current environment, investors are focused on short-term changes in the
209 equity markets, and as a result, both forecasted and historical growth rate information
210 become unreliable measures of expected near-term growth for individual firms. It is,
211 therefore, difficult to predict with accuracy a sustainable constant growth rate for
212 companies. Mr. Bodmer provides more evidence on this point. However, as Mr. Bodmer
213 and I discussed in our respective direct testimonies, while the current market
214 discontinuity affects short-term expectations for different companies, there are still
215 expectations that over the long run that the entire economy will continue to grow at a
216 reasonable rate. While there may be short-term variations, long term growth in the US
217 economy, as measured by the historic growth in real gross domestic product (real GDP),
218 is a reasonable expectation. This has implications for the Commission because of the
219 uncertainty that exists today following a recent financial crisis. Both Staff Witness
220 McNally and I have recommended that the Commission recognize that utility returns will
221 trend towards the long-term growth in the economy. Only Mr. Moul has testified that the
222 expectations created by the short-term financial crisis are sustainable indefinitely.

223
224 Mr. Moul did acknowledge that, over time, growth is cyclical – it ramps-up and ramps-
225 down over time. However, rather than select a sustainable long-term growth rate, Mr.
226 Moul relied on short-term growth rates calculated during a time of short-term financial

227 distress as substitutes for more realistic long-term growth rates. To assume that growth
228 will always be at the level of a near-term forecast is not a reasonable or objective analysis
229 of expected growth or the cost of equity.

230 **Q. MR. MOUL ARGUED THAT THE FEDERAL ENERGY REGULATORY**
231 **COMMISSION (“FERC”) HAS REJECTED THE USE OF THE NON-**
232 **CONSTANT GROWTH DCF MODEL. IS HE CORRECT?**

233
234 A. Mr. Moul is correct that FERC determined that use of a two-stage DCF model would not
235 be appropriate for electric utilities at that time. As he reported, “FERC declined to use
236 the two-stage DCF because electric companies did not display the growth characteristics
237 that fit the two-stage model characteristics.” NS-PGL Ex. PRM 2.0 at 16, LL 367-9.
238 However, Mr. Moul neglected to inform the Commission that in the same proceeding
239 FERC concluded:

240 we believe that significant differences exist in the electric
241 utility industry and the natural gas pipeline industry which
242 warrant the continued use of different growth rates in the
243 DCF models for each. (92 FERC ¶61,070 (July 27, 2000))

244
245 The relatively stable industry structure for gas pipelines, which FERC relied on in
246 reaffirming two-stage models for those firms, is exceeded by the stability of the gas
247 distribution industry.

248
249 **Q. MR. MOUL ARGUED THAT GDP GROWTH IS NOT AN APPROPRIATE**
250 **MEASURE OF LONG-TERM EARNINGS GROWTH FOR USE IN THE DCF.**
251 **NS-PGL EX. PRM-2.0 AT 16-17, LL. 338-54. DO YOU AGREE?**

252
253 A. No. Mr. Moul argues that GDP growth does not appropriately consider expectation for
254 the growth in corporate profits. This is simply not true. The historic growth in GDP
255 includes growth in corporate profits. Therefore, GDP growth does include an expectation
256 that corporate profits will continue to grow as they have historically. This is a reasonable

257 assumption for long-term growth. This is especially so given the subjectivity of growth
258 forecasts, as I have identified in my direct testimony.

259

260 **Q. MR. MOUL ARGUED THAT NATURAL GAS UTILITIES CAN ACHIEVE**
261 **EARNINGS GROWTH THAT EXCEEDS LONG-TERM GROWTH IN GDP. NS-**
262 **PGL EX. PRM-2.0 AT 19, LL. 384--95. IS THIS A REASONABLE**
263 **EXPECTATION?**

264
265 A. No. It is simply unreasonable to expect that regulated public utilities will achieve
266 sustainable earnings growth that exceeds the long-term growth rate of GDP. It is hard to
267 believe that regulated natural gas utilities will grow more quickly than the entire
268 economy, especially in an energy climate that is focused on the impacts of climate
269 change and is increasingly turning to energy efficiency to meet energy needs.

270

271 **Q. MR. MOUL ARGUED THAT YOUR ANALYSIS DOES NOT ACCURATELY**
272 **REFLECT INVESTORS' EXPECTATION IN THE TEST YEAR. DO YOU**
273 **AGREE?**

274
275 A. No. Mr. Moul's argument is subjective and does not add anything to this proceeding.
276 The actual return required to induce investors to make a particular investment is not a
277 directly observable number – that is why estimates are necessary. Similarly, investors'
278 requirements for future dividends and rates of growth cannot be found in the pages of the
279 Wall Street Journal and plugged into the model (although this is an approach that Mr.
280 Moul seems to favor).

281

282 As Mr. Bodmer explained in his direct testimony, the growth rates used in the DCF
283 model should be sustainable and satisfy three basic criteria:

- 284
- 285
- 286
- 287
- 288
- 289
- 290
- Earnings growth rate inputs must be reasonable in light of the anticipated growth in GDP and other limiting factors;
 - The long term growth rate must not implicitly require continued earnings above the regulated firm’s cost of equity, as derived in the analysis; and
 - The long term growth rates must not require dividend payout ratios that are not consistent with the capital expenditure growth rate and the return on equity.

291 As Mr. Bodmer’s testimony showed, current analysts’ 3 to 5 year growth projections do

292 not meet these simple, common sense tests. *See, e.g.*, CUB-City Ex. 1.0 at 23-25, LL

293 433-88. As I discussed in my direct testimony, this is not a new revelation, as the

294 financial literature has looked at analysts’ growth rates dubiously for a number of years.

295 CUB-City Ex. 2.0 at 13-14, LL 290-323. This literature reveals that many researchers

296 have found that analysts tend to be optimistic about future growth and produce forecasts

297 that are upwardly biased. This upward bias translates into DCF cost of capital estimates

298 that are above the true required cost of capital. Estimates based on such forecasts, in Mr.

299 Moul’s analysis short-term forecasts, should be given little or no weight.

300 The Commission should not accept mechanistic replications of quantitative

301 modeling used in past, more stable periods of the economy. Rather, in light of the

302 financial crisis, the Commission should carefully scrutinize the reasonableness of re-

303 using old forms of financial models and ensure that its determination in this case is

304 consistent with current financial circumstances.

305

306 **II. C. EFFECT OF DECLINING DIVIDEND PAYOUT RATIOS**

307

308 **Q. MR. MOUL ARGUED THAT YOU ARE INCORRECT IN YOUR TESTIMONY**

309 **THAT USING EARNINGS GROWTH RATES IN THE DCF ANALYSIS**

310 **OVERSTATES THE COST OF EQUITY WHEN THE DIVIDEND PAYOUT**

311 **RATIO IS EXPECTED TO DECLINE. NS-PGL EX. PRM-2.0 AT 34, LL 680--85.**

312 **IS HIS ARGUMENT PERSUASIVE?**

313

314 A. No. Mr. Moul asserted that with a declining dividend payout ratio, using the dividends
 315 per share growth rate in the DCF will underestimate the return. Mr. Moul further claimed
 316 that growth will only occur at the higher earnings per share growth rate, and therefore
 317 earnings-per-share growth must be used in the DCF model. However, when the dividend
 318 payout ratio is declining, using earnings per share growth in the DCF produces biased
 319 results. Because the dividend payout ratio is declining, using earnings growth will
 320 overstate the real growth expected in the company. This type of selective analysis further
 321 highlights Mr. Moul’s subjective bias. As shown in the chart below, blindly using
 322 earnings-per-share growth in the DCF, regardless of how the dividend payout ratio is
 323 projected to change, will lead to inaccurate results.

324

The Impact of Declining Dividend Payouts on DCF Model Results

	100% Dividend Payout	50% Dividend Payout	100% Declining to 50% Dividend Payout
ROE	8%	8%	8%
Earnings	\$2	\$2	\$2
Payout Ratio	100%	50%	100% Declining to 50%
Current Dividend	\$2	\$1	\$2
Share Price	\$25	\$25	\$25
Yield	8%	4%	8%
Earnings Growth	0%	4%	4%
DCF Results	8%	8%	12%

325

326 As I discussed in my direct testimony, I have corrected this problem by using the internal
 327 growth rate in the first stage of my DCF analysis.

328

329

330 **Q. MR. MOUL CRITICISED THE EXCLUSION OF EXTERNAL GROWTH IN**
331 **YOUR DCF ANALYSIS BECAUSE HE CLAIMS THAT COMPANIES CAN**
332 **SELL NEW COMMON STOCK. NS-PGL EX. PRM-2.0 AT 35, LL 692--94. IS**
333 **THIS A VALID REASON TO INCLUDE EXTERNAL GROWTH IN THE DCF**
334 **FOR A REGULATED PUBLIC UTILITY?**

335
336 A. No. As I stated in my direct testimony, additional equity sales create growth in the
337 common equity of a company only when market prices exceed book values, because the
338 premium over book value on the new shares shows up on the company's books as
339 increased equity. The Commission sets rates based on the book value of investment, and
340 a mere increase in share prices does not change the amount actually invested in the firm,
341 as higher prices on old shares represent gains for sellers, not actual new investment for
342 the utility. Consequently, adjusting for the difference between market and book values
343 only serves to inflate the cost of equity the Commission grants to a regulated utility.

344
345 As Mr. Bodmer explained, there is no reason to assume that market prices should remain
346 significantly above or below book values for the indefinite future, although there are
347 circumstances that can cause minor deviations in the two values. When, as here, the
348 dividend payout ratio is expected to change because more capital is being retained by the
349 business, the use of the fundamental growth formula – Earnings Growth = (Retention
350 Rate) x ROE -- is a more reasonable method for estimating growth rates for use in the
351 DCF formula. Whether the dividend payout ratio increases or decreases, such change (if
352 not taken into account) creates distortions in DCF model results.

353
354 **Q. MR. MOUL TAKES ISSUE WITH YOUR TESTIMONY REGARDING MARKET**
355 **AND BOOK VALUES BECAUSE HE ARGUES THAT THERE ARE MANY**
356 **FACTORS WHICH CAN DRIVE MARKET AND BOOK VALUES TO**
357 **DIVERGE. IS THIS A VALID REASON TO ACCEPT A HIGHER COST OF**
358 **EQUITY?**

359
360 A. No. A basic tenet of utility cost of capital theory is that, if a company's sustainable
361 earnings exactly match its cost of capital, the market value of the company will equal the
362 book value of its assets. In terms of the DCF model, the present value of the company's
363 cash flows, discounted at the cost of capital, will be exactly the same as the value of the
364 assets in rate base. The same cash flow analysis shows that a market-to-book ratio that
365 exceeds 1.0 indicates that a utility is earning more than its cost of capital. I am not
366 advocating a strict methodology that requires a market-to-book ratio of exactly 1.0 at all
367 times, instead, I am recommending that the Commission not make adjustments based on
368 the divergence of market and book values. Mr. Moul's attempts to include external
369 growth in my DCF analysis and his proposed leverage adjustments to both the DCF and
370 CAPM are simply inconsistent with the basic tenets of ratemaking.

371
372 The Commission has repeatedly concluded that there is no reason to adjust market-based
373 DCF model results before applying them to the book value of assets in rate base. It has
374 traditionally been the Commission's practice to apply unadjusted market-based DCF
375 results to the book value rate base assets, and Mr. Moul has not presented any evidence
376 that should persuade the Commission that the market has not already taken this
377 information into account or to change its long-standing policy.

378

379 **II. D. CAPM**

380

381 **Q. MR. MOUL ARGUED THAT THE RESEARCH YOU HAVE PRESENTED**
382 **WITH RESPECT TO THE CAPM PREDATES THE RECENT SIGNIFICANT**
383 **INCREASE IN MARKET VOLATILITY AND IS THEREFORE NOT**
384 **RELEVANT TODAY. NS-PGL EX. PRM-2.0 AT 38, LL 775-77. IS THIS A**
385 **REASONABLE CONCLUSION?**

386
387 A. No. First, Mr. Moul has not provided evidentiary support for his supposition that the
388 research I have relied upon is not relevant. Second, if the research I have relied on is
389 somehow not relevant today, simply because it pre-dates the recent financial crisis, then
390 the research Mr. Moul relied upon is similarly flawed. Assessing the record as Mr. Moul
391 suggests would leave the Commission in an untenable position. It would toss out most of
392 the analytical foundation on which the Commission has previously relied. A better
393 course is to approach issues objectively, as Mr. Bodmer and I have recommended. The
394 Commission should undertake an analysis of all relevant issues, like the broad, more
395 objective examination I have presented.

396

397 **III. RESPONSE TO MR. McNALLY**

398 **Q. HAVE YOU REVIEWED THE TESTIMONY OF STAFF WITNESS McNALLY?**

399
400 A. Yes. The largest single difference in Mr. McNally's analysis and the analysis that I
401 performed is the growth rates we used. Mr. McNally uses analysts' forecasts of short-
402 term growth for his first stage growth rate, while my analysis relies on historic
403 fundamental growth for the first stage, for the reasons that I have identified. The effect of
404 this difference on the DCF model results is approximately 117 basis points.

405
406 **Q. IF THE COMPANIES PROPOSED RIDERS ARE ACCEPTED, MR. McNALLY**
407 **PROPOSED A 30 BASIS POINT REDUCTION FOR NORTH SHORE GAS'S**
408 **APPROVED RETURN ON EQUITY AND A 75 BASIS POINT REDUCTION FOR**
409 **PEOPLES GAS. HOW DOES MR. McNALLY'S ANALYSIS COMPARE TO**
410 **YOURS?**

411
412 A. In addition to the 10 basis point adjustment already accepted in the Companies' last rate
413 case for Rider VBA, Mr. McNally conducted three different analyses to support his

414 adjustment. He calculated the impact of the Rider UEA on the Companies Credit ratings,
415 variability in each of the Companies' operating incomes as measured by the CAPM beta
416 factor, and an analysis of operating incomes both with and without Rider UEA. Mr.
417 McNally's analysis produced the following results:

418

419

	<u>North Shore</u>	<u>Peoples Gas</u>
420		
421	Implied Moody's ratings	10 basis points
422	Beta adjustment	30 basis points
423	Operating income adjustment	26 basis points
424		107 basis points

425 Based on the midpoints of these ranges, Mr. McNally recommend adjustments to North
426 Shore's and Peoples Gas's costs of common equity of 20 basis points and 65 basis points,
427 respectively, should the Commission authorize the implementation of Rider UEA. He
428 also adopted the 10 basis point adjustment the Commission already accepted for Rider
429 VBA.

430

431 I recommended in my direct testimony that if the Commission approves Rider UEA and
432 rate design changes that stabilize the Companies' revenues it should take two actions:

- 433 1. Reduce the ROE granted to both Peoples and North Shore by 22.5 basis
434 points (for a total reduction of 32.5 basis points from Riders VBA and
435 UEA and the stabilizing rate design changes); and
- 436 2. Adopt an ROE at the low end of any range of reasonable estimates.
437

438 Mr. McNally and I agree that the impact of Riders VBA and UEA on the Companies'
439 revenues are substantive and require a significant adjustment to their returns on equity.

440 Only Mr. Moul and Mr. Fetter disagree.

441

442 **IV. RIDER ICR**

443 **Q. PGL WITNESS JOHNSON CRITICIZED YOUR PROPOSAL TO SET THE**
444 **RATE OF RETURN ON ALL INVESTMENTS MADE UNDER RIDER ICR AT**
445 **THE UTILITIES' COST OF DEBT. ARE HIS ARGUMENTS PERSUASIVE?**

446
447 A. No. Mr. Johnson argues that equity investors always assume more risk than debt
448 investors, and that it is not accurate that the expected equity returns on these assets would
449 be the same as the debt rate. What Mr. Johnson fails to acknowledge is that Rider ICR
450 eliminates both the regulatory lag and the risk of non-recovery (for prudent costs). This
451 level of assurance is significant and has a huge value to investors. Staff witness McNally
452 made similar recommendations

453 That is, while Rider ICR eliminates the risk of non-
454 recovery of prudent and reasonable costs, the prudence and
455 reasonableness of Rider ICR investments is still subject to
456 annual reviews. Thus, there remains some degree of risk of
457 non-recovery of costs. Staff Ex. 7.0 at 35, LL 698--701

458
459 I do not share Mr. McNally's view that the risk associated with the prudence and
460 reasonableness of investments made under Rider ICR represents a significant risk to
461 management. As long as the Companies are not extravagant in their expenditures, they
462 will likely argue that the Commission's earlier approval of their proposal to accelerate
463 main replacement demonstrates the prudence of their investments. However, if the
464 Commission believes that these risks are significant because the Commission will
465 examine these issues without a predisposition, then it should adopt Mr. McNally's

466

467 **V. CAPITAL STRUCTURE**

468 **Q. STAFF AND THE COMPANY DISAGREE OVER THE APPROPRIATE**
469 **CAPITAL STRUCTURE FOR USE IN THIS PROCEEDING. WHICH CAPITAL**
470 **STRUCTURE DO YOU BELIEVE IS MOST APPROPRIATE?**

471

472 A. I agree with Ms. Kight-Garlich that short-term debt must be included in the capital
473 structure for ratemaking purposes, as I testified in my direct testimony. I have adopted
474 Ms. Kight-Garlich's recommended capital structure and debt costs to isolate the impact
475 that my cost of equity proposal has on the Companies' cost of capital.

476

477 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

478 A. Yes.