

STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY :  
 :  
Proposed general increase in electric rates : No. 07-0566  
 :

Rebuttal Testimony of  
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Principal,  
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On Behalf of  
Commonwealth Edison Company

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1 **I. Introduction and Summary of Rebuttal Testimony**

2 Q. Please state your name and affiliation.

3 A. My name is Samuel C. Hadaway. I previously filed Direct Testimony on behalf  
4 of Commonwealth Edison Company ("ComEd" or the "Company") in this  
5 proceeding (ComEd Exhibits 10.0-10.9).

6 **A. Purpose of Testimony**

7 Q. What is the purpose of your rebuttal testimony?

8 A. The purpose of my testimony is to rebut the return on equity ("ROE")  
9 recommendations of Illinois Commerce Commission Staff ("Staff") witness  
10 Michael McNally, Illinois Industrial Energy Consumers ("IIEC") witness Michael  
11 P. Gorman, and Citizens' Utility Board ("CUB") witness Christopher C. Thomas.  
12 In my analysis, I will respond to their rate of return recommendations and  
13 demonstrate that their recommendations are not consistent with current market  
14 turmoil or the higher capital costs that corporate borrowers like ComEd are  
15 currently required to pay. I will also respond to these witnesses' comments on the  
16 methodology I used in my direct testimony to estimate ComEd's cost of equity  
17 and I will update my ROE analysis for current market costs and conditions.  
18 Finally, I will responded to the contention by IIEC and AG/CUB that a downward  
19 adjustment to ComEd's return on equity is required if the Commission approves  
20 Riders SMP and SEA. My rebuttal analysis continues to indicate that ComEd's  
21 market-required ROE is 10.75 percent.

22 **B. Summary of Positions**

23 Q. What are the parties' ROE recommendations?

24 A. Staff witness McNally recommends an ROE of 10.3 percent. IIEC witness  
25 Gorman recommends a base ROE of 10.2 percent with a reduction of 50 basis  
26 points, to 9.7 percent, if Riders SMP and SEA are adopted. CUB witness Thomas  
27 recommends an ROE of only 7.77 percent with a further recommendation that  
28 investments made under Riders SMP and SEA should received a return of no  
29 more than the Company's cost of debt at 6.74 percent. As I demonstrated in my  
30 Direct Testimony and reconfirm here, ComEd's cost of equity capital is 10.75  
31 percent.

32 **C. General Assessment of Other Parties' Recommendations**

33 Q. What are your general assessments of the other parties' rate of return positions?

34 A. The other parties rate of return recommendations are below ComEd's cost of  
35 equity capital. Mr. McNally and Mr. Gorman offer base ROE recommendations  
36 that are near the low end of the ROE range that I recommended in my Direct  
37 Testimony. However, corporate capital costs have subsequently increased and  
38 these recommendations do not reflect those increases. Additionally, their current  
39 recommendations are not consistent with the analysis and testimony they  
40 presented in ComEd's previous case (Docket No. 05-0597). I will show that had  
41 they been consistent with their previous methodologies, their current ROE  
42 estimates would have been significantly higher. I will also show that Mr.  
43 Gorman's further recommendation to reduce ROE to only 9.7 percent for Riders  
44 SMP and SEA is unsupported. Mr. Thomas' ROE recommendation is entirely  
45 unreasonable. His criticism of the Commission's use of the capital asset pricing  
46 model ("CAPM") is based largely on stale and unresolved academic research and

47 provides no new information that the Commission has not previously considered  
48 and rejected.

49 Mr. McNally's and Mr. Gorman's ROEs would have been higher if they  
50 had been consistent with their prior testimony. In the previous ComEd case, they  
51 both relied on the constant growth DCF model and they obtained their DCF  
52 growth rates exclusively from analysts' growth rate estimates. In the present case,  
53 Mr. McNally entirely rejects his prior approach and Mr. Gorman attempts to  
54 dilute his higher constant growth DCF results by now injecting a multi-stage DCF  
55 model. I will show that had Mr. McNally applied the same DCF method he used  
56 in the prior case, his ROE estimate would have been well above 11 percent. Mr.  
57 Gorman's current constant growth DCF analysis, in fact, produces an ROE of 11.0  
58 percent (IIEC Exhibit 2.6 and IIEC Exhibit 2.0 at 19). When these  
59 inconsistencies are resolved, the Staff and IIEC analyses support an ROE at least  
60 equivalent to 10.75 percent.

61 Q. In the recent North Shore and Peoples Gas case (Docket Nos. 07-0241 and 07-242  
62 Cons.), the Commission averaged three ROE methods to determine a base ROE  
63 estimate. If a similar approach were used in this case, what would the result be?

64 A. In the North Shore/Peoples case, the Commission excluded ROE estimates that it  
65 found unacceptable (City/CUB's annual DCF and CAPM results, Staff's DCF  
66 results, and the Utilities' non-CAPM risk premium and other adjustments to their  
67 results). The Commission then averaged the Staff and Utilities' CAPM estimates  
68 (11.34% and 11.25%) and the Utilities' unadjusted DCF estimate (9.01%). The  
69 average base ROE was therefore 10.38 percent (February 5, 2008 Order at 100).

70 If that approach were taken in the present case, the Commission would average  
71 Mr. McNally's CAPM estimate (11.25%), Mr. Gorman's constant growth DCF  
72 estimate (11.0%) and his CAPM estimate (10.7%), and my updated quarterly  
73 constant growth DCF estimate (10.95%) and my long-term CAPM estimate  
74 (10.1%). The average of these five ROE estimates is 10.8 percent—again very  
75 consistent with the cost I recommend.

76 **D. Recent Economic Trends**

77 Q. How have interest rates changed since you prepared your Direct Testimony?

78 A. While short-term interest rates have been driven down by the Federal Reserve  
79 System's recent monetary policies, long-term corporate borrowing rates have  
80 actually increased. The following table is an update through February 2008 of the  
81 interest rate summary data that I provided in my Direct Testimony. The most  
82 recent data available in my Direct Testimony were September 2007. Since then,  
83 although the Federal Reserve System has continued to reduce the short-term  
84 Federal Funds rate, long-term corporate interest rates have, in fact, increased.  
85 While market turmoil and "flight to safety" issues have also pushed down shorter-  
86 term Treasury rates, corporate spreads, which reflect investors' risk perceptions,  
87 have widened significantly. The data in Table 1 show that such spreads are  
88 currently much wider than they have been at any time in the past two years.  
89 These factors provide important perspective for evaluating the alternative rate of  
90 return positions.

**Table 1**  
**Long-Term Interest Rate Trends**

| <b>Month</b> | <b>Triple-B<br/>Utility<br/>Rates</b> | <b>20-Year<br/>Treasury<br/>Rates</b> | <b>10-Year<br/>Treasury<br/>Rates</b> | <b>20-Year<br/>Treasury<br/>Spreads</b> | <b>10-Year<br/>Treasury<br/>Spreads</b> |
|--------------|---------------------------------------|---------------------------------------|---------------------------------------|---|---|
| Jan-05       | 5.95%                                 | 4.77%                                 | 4.22%                                 | 1.18%                                   | 1.73%                                   |
| Feb-05       | 5.78%                                 | 4.61%                                 | 4.17%                                 | 1.17%                                   | 1.61%                                   |
| Mar-05       | 6.01%                                 | 4.89%                                 | 4.50%                                 | 1.12%                                   | 1.51%                                   |
| Apr-05       | 5.95%                                 | 4.75%                                 | 4.34%                                 | 1.20%                                   | 1.61%                                   |
| May-05       | 5.88%                                 | 4.56%                                 | 4.14%                                 | 1.32%                                   | 1.74%                                   |
| Jun-05       | 5.70%                                 | 4.35%                                 | 4.00%                                 | 1.35%                                   | 1.70%                                   |
| Jul-05       | 5.81%                                 | 4.48%                                 | 4.18%                                 | 1.33%                                   | 1.63%                                   |
| Aug-05       | 5.80%                                 | 4.53%                                 | 4.26%                                 | 1.27%                                   | 1.54%                                   |
| Sep-05       | 5.83%                                 | 4.51%                                 | 4.20%                                 | 1.32%                                   | 1.63%                                   |
| Oct-05       | 6.08%                                 | 4.74%                                 | 4.46%                                 | 1.34%                                   | 1.62%                                   |
| Nov-05       | 6.19%                                 | 4.83%                                 | 4.54%                                 | 1.36%                                   | 1.65%                                   |
| Dec-05       | 6.14%                                 | 4.73%                                 | 4.47%                                 | 1.41%                                   | 1.67%                                   |
| Jan-06       | 6.06%                                 | 4.65%                                 | 4.42%                                 | 1.41%                                   | 1.64%                                   |
| Feb-06       | 6.11%                                 | 4.73%                                 | 4.57%                                 | 1.38%                                   | 1.54%                                   |
| Mar-06       | 6.25%                                 | 4.91%                                 | 4.72%                                 | 1.34%                                   | 1.53%                                   |
| Apr-06       | 6.54%                                 | 5.22%                                 | 4.99%                                 | 1.32%                                   | 1.55%                                   |
| May-06       | 6.59%                                 | 5.35%                                 | 5.11%                                 | 1.24%                                   | 1.48%                                   |
| Jun-06       | 6.61%                                 | 5.29%                                 | 5.11%                                 | 1.32%                                   | 1.50%                                   |
| Jul-06       | 6.61%                                 | 5.25%                                 | 5.09%                                 | 1.36%                                   | 1.52%                                   |
| Aug-06       | 6.43%                                 | 5.08%                                 | 4.88%                                 | 1.35%                                   | 1.55%                                   |
| Sep-06       | 6.26%                                 | 4.93%                                 | 4.72%                                 | 1.33%                                   | 1.54%                                   |
| Oct-06       | 6.24%                                 | 4.94%                                 | 4.73%                                 | 1.30%                                   | 1.51%                                   |
| Nov-06       | 6.04%                                 | 4.78%                                 | 4.60%                                 | 1.26%                                   | 1.44%                                   |
| Dec-06       | 6.05%                                 | 4.78%                                 | 4.56%                                 | 1.27%                                   | 1.49%                                   |
| Jan-07       | 6.16%                                 | 4.95%                                 | 4.76%                                 | 1.21%                                   | 1.40%                                   |
| Feb-07       | 6.10%                                 | 4.93%                                 | 4.72%                                 | 1.17%                                   | 1.38%                                   |
| Mar-07       | 6.10%                                 | 4.81%                                 | 4.56%                                 | 1.29%                                   | 1.54%                                   |
| Apr-07       | 6.24%                                 | 4.95%                                 | 4.69%                                 | 1.29%                                   | 1.55%                                   |
| May-07       | 6.23%                                 | 4.98%                                 | 4.75%                                 | 1.25%                                   | 1.48%                                   |
| Jun-07       | 6.54%                                 | 5.29%                                 | 5.10%                                 | 1.25%                                   | 1.44%                                   |
| Jul-07       | 6.49%                                 | 5.19%                                 | 5.00%                                 | 1.30%                                   | 1.49%                                   |
| Aug-07       | 6.51%                                 | 5.00%                                 | 4.67%                                 | 1.51%                                   | 1.84%                                   |
| Sep-07       | 6.45%                                 | 4.84%                                 | 4.52%                                 | 1.61%                                   | 1.93%                                   |
| Oct-07       | 6.36%                                 | 4.83%                                 | 4.53%                                 | 1.53%                                   | 1.83%                                   |
| Nov-07       | 6.27%                                 | 4.56%                                 | 4.15%                                 | 1.71%                                   | 2.12%                                   |
| Dec-07       | 6.51%                                 | 4.57%                                 | 4.10%                                 | 1.94%                                   | 2.41%                                   |
| Jan-08       | 6.35%                                 | 4.35%                                 | 3.74%                                 | 2.00%                                   | 2.61%                                   |
| Feb-08       | 6.60%                                 | 4.37%                                 | 3.53%                                 | 2.23%                                   | 3.07%                                   |

Sources: Mergent Bond Record (Utility Rates);  
www.federalreserve.gov (Treasury Rates).

92 Q. What levels of interest rates are forecast for the coming year?

93 A. Both corporate and government interest rates are expected to rise from present  
94 levels. I have reproduced as ComEd Exhibit 29.1 Standard & Poor's most recent  
95 economic forecast from its *Trends & Projections* publication for February 2008.  
96 The summary interest rate data from that publication are presented in the  
97 following table:

98 Table 2:  
99 Standard & Poor's Interest Rate Forecast

|                         | Current | Average<br>2008 Est. | Average<br>2009 Est. |
|-------------------------|---------|----------------------|----------------------|
| 100 Treasury Bills      | 2.0%    | 2.0%                 | 2.6%                 |
| 101 10-Yr. T-Bonds      | 3.9%    | 4.0%                 | 4.9%                 |
| 102 30-Yr. T-Bonds      | 4.7%    | 4.5%                 | 5.1%                 |
| 103 Aaa Corporate Bonds | 5.7%    | 5.7%                 | 6.4%                 |

104 Sources: [www.yahoo.com](http://www.yahoo.com) Yahoo Finance (Current Rates);  
105 Standard & Poor's *Trends & Projections*, February 2008, page 8  
106 (Projected Rates).  
107  
108

109 The data in Table 2 show that interest rates are projected to increase further  
110 during the coming year. Relative to current levels, rates on 10-year and 30-year  
111 Treasury bonds for 2009 are expected to increase by an additional 40 to 100 basis  
112 points. Corporate borrowing costs are also expected to increase by an additional  
113 70 basis points.

114 These factors indicate that the other parties' ROE recommendations are  
115 below the cost of equity for ComEd. Their recommendations are inconsistent  
116 with the wider corporate spreads that borrowers like ComEd are currently  
117 required to pay. Their positions are also inconsistent with projections for further  
118 interest rate increases in 2009.

119 **III. Response to Staff Witness Michael McNally**

120 **A. Summary of Mr. McNally's ROE Recommendation**

121 Q. How did Mr. McNally arrive at his 10.3 percent ROE recommendation?

122 A. His ROE recommendation is the average of his multi-stage DCF estimate (9.35%)  
123 and his long-term CAPM estimate (11.25%) (Staff Exhibit 4.0 at 28).

124 **B. Comments on Mr. McNally's Methodology**

125 Q. What are your principal disagreements with Mr. McNally?

126 A. I disagree with Mr. McNally's exclusion of the constant growth DCF model,  
127 which the Staff (including Mr. McNally) has consistently used in prior cases. I  
128 also disagree with several technical aspects of his multi-stage DCF analysis.

129 Q. What is the difference between Mr. McNally's current multi-stage DCF analysis  
130 and the constant growth analysis that the Staff typically has used?

131 A. In contrast to the "constant" growth assumption of the traditional DCF model, the  
132 multi-stage approach allows alternative growth rates in the various "stages" or  
133 time periods covered by the model. For his analysis, Mr. McNally assumed that  
134 analysts' growth rates would prevail for the first five years. He then established a  
135 transition growth rate in years six through 10. And, finally, he assumed that a  
136 much lower constant growth rate would prevail in years 11 to infinity. This  
137 approach produces a much lower estimate of ROE because the much lower third-  
138 stage growth rate prevails for a much longer time period, which effectively dilutes  
139 the higher growth rates in the earlier periods.

140 Q. What would the result have been if Mr. McNally had performed the same constant  
141 DCF analysis that he used in Docket No. 05-0597?

142 A. I have prepared that analysis in ComEd Exhibit 29.2. In that analysis, I applied  
143 the same constant growth DCF model that Mr. McNally used in Docket No. 05-  
144 0597. I used his current comparable company group, his stock prices and  
145 dividends, and his Zacks analysts' growth rate forecasts from Staff Exhibit 4.0,  
146 Schedules 4.5 through 4.7. As shown in column 9 of ComEd Exhibit 29.2, the  
147 average comparable company ROE from the Staff's typical DCF analysis is 11.79  
148 percent.

149 Q. What rate of return was indicated by Mr. McNally's constant growth analysis in  
150 Docket No. 05-0597?

151 A. His DCF analysis in that case indicated an ROE of 9.36 percent.

152 Q. Why is the current constant growth ROE so much higher?

153 A. The difference is mostly due to higher analysts' growth forecasts. In Docket No.  
154 05-0597, Mr. McNally used the same Zacks forecast source, but at that time the  
155 average growth projection for his comparable group was only 4.76 percent. The  
156 current average growth rate projection is 7.72 percent.

157 Q. Do you recommend that the Commission should use 11.79 percent as a stand-  
158 alone estimate of ROE?

159 A. No. However, it is equally inappropriate for Mr. McNally to entirely exclude the  
160 traditional Staff DCF approach. If he wishes to consider alternative DCF  
161 approaches, as many regulatory economists do, a combination of alternatives  
162 would be more appropriate. For example, if one simply averages the constant  
163 growth DCF estimate with his multi-stage DCF estimate, the result is a mid-range  
164 ROE of approximately 10.6 percent ( $11.79\% + 9.35\% / 2 = 10.57\%$ ).

165 Q. What is the DCF range from your multi-stage growth DCF analysis?

166 A. In my Direct Testimony in ComEd Exhibit 10.5, the indicated multi-stage DCF  
167 range was 10.5 percent to 10.6 percent. As I will discuss below, my updated  
168 multi-stage range (ComEd Exhibit 29.6) is still 10.5 percent to 10.6 percent.

169 Q. Why is Mr. McNally's multi-stage DCF estimate so much lower than yours?

170 A. His multi-stage estimate is lower because his long-term (third-stage) growth rate  
171 is unreasonably low.

172 Q. How are your respective long-term growth rates determined?

173 A. My long-term growth rate is my estimate of expected long-term growth in  
174 nominal Gross Domestic Product ("GDP"). As I explained in my Direct  
175 Testimony, long-term GDP growth is a reasonable proxy for investors' long-term  
176 growth rate expectations, as required in the DCF model, because GDP is the most  
177 general measure of growth in the U.S. economy and utilities are a fundamental  
178 sector of the economy. Therefore, in the very long-run, utilities can reasonably be  
179 expected to grow at about the same rate as the economy. My updated GDP  
180 growth rate forecast is presented in ComEd Exhibit No. 29.5. The estimated  
181 growth rate from that analysis is 6.5 percent.

182 Mr. McNally's third stage growth rate is based on a concept that cannot be  
183 reasonably supported, either academically or empirically. His concept is that the  
184 long-term expected growth rate in the economy is equal to the forward rate on  
185 long-term Government securities. To my knowledge there is no proven academic  
186 or other accepted theory that supports using the forward rate in this manner in the  
187 DCF model. As such, Mr. McNally's third-stage growth rate is unsupported and

188 is highly speculative. Additionally, I will demonstrate that the rate, as he  
189 calculates it, may be extremely volatile and is significantly influenced by interest  
190 rate levels and the shape of the U.S. Treasury bond yield curve.

191 Q. Specifically, how is the forward rate calculated?

192 A. Mr. McNally calculates the forward or expected rate on a 20-year U.S. Treasury  
193 bond to be bought 10 years from today. While that calculation is sometimes  
194 daunting to introductory finance students, it is, in fact, a time-weighted average  
195 derived from current 10-year and 30-year Treasury bond rates. The explanation is  
196 simpler than the calculation. Consider a low-risk investor with a 30-year  
197 investment horizon. That investor could simply buy a 30-year Treasury bond and  
198 hold it to maturity. Alternatively, he or she might initially buy a 10-year bond but  
199 recognize that they will have to reinvest their money when the 10-year bond  
200 matures. In Mr. McNally's calculation, the estimated 10-year forward, 20-year  
201 rate is simply the rate that has to be earned on the 20-year bond so that the current  
202 10-year investment plus the 20-year investment made 10 years from now combine  
203 to give the same return as the 30-year bond gives today. While such forward  
204 calculations are routinely used in hedge and commodity trading strategies, it is  
205 beyond the pale to believe that they are a reasonable proxy for investors' long-  
206 term growth expectations in the DCF model.

207 Q. Why is the 20-year forward rate volatile?

208 A. The forward rate is volatile because it depends on the absolute level of interest  
209 rates and the shape of the U.S. Treasury bond yield curve. In Mr. McNally's  
210 calculation, the 20-year rate is entirely determined by the rates that existed for 10-

211 year and 30-year Treasury bonds on February 1, 2008. The following table  
 212 demonstrates the 20-year forward rate based on the monthly 10-year and 30-year  
 213 Treasury bond rates that existed during 2007, and for three hypothetical yield  
 214 curve scenarios:

Table 3  
 Implied 20-year Rate, 10 Years Forward

| Month  | 10-Year<br>Treasury | 30-Year<br>Treasury | Implied<br>20f 10* |
|--------|---------------------|---------------------|--------------------|
| Jan-07 | 4.76%               | 4.85%               | <b>4.90%</b>       |
| Feb-07 | 4.72%               | 4.82%               | <b>4.87%</b>       |
| Mar-07 | 4.56%               | 4.72%               | <b>4.80%</b>       |
| Apr-07 | 4.69%               | 4.87%               | <b>4.96%</b>       |
| May-07 | 4.75%               | 4.90%               | <b>4.98%</b>       |
| Jun-07 | 5.10%               | 5.20%               | <b>5.25%</b>       |
| Jul-07 | 5.00%               | 5.11%               | <b>5.17%</b>       |
| Aug-07 | 4.67%               | 4.93%               | <b>5.06%</b>       |
| Sep-07 | 4.52%               | 4.79%               | <b>4.93%</b>       |
| Oct-07 | 4.53%               | 4.77%               | <b>4.89%</b>       |
| Nov-07 | 4.15%               | 4.52%               | <b>4.71%</b>       |
| Dec-07 | 4.10%               | 4.53%               | <b>4.75%</b>       |

  

| Higher Rate Scenarios |       |       |              |
|-----------------------|-------|-------|--------------|
| Steep Yield Curve     | 4.00% | 6.00% | <b>7.01%</b> |
| Flat Yield Curve      | 5.50% | 6.00% | <b>6.25%</b> |
| Level Yield Curve     | 6.00% | 6.00% | <b>6.00%</b> |

\*20f 10 = [(1+30-yr)<sup>30</sup>/(1+10-yr)<sup>10</sup>]<sup>1/20</sup> - 1

215  
 216 As show in the right-hand column of Table 3, Mr. McNally's long-term growth  
 217 rate projection would have ranged between 4.71 percent in November 2007 and  
 218 5.25 percent in June 2007. Since for DCF purposes the intent is to estimate an  
 219 expected constant growth rate, the actual data for 2007 raise serious questions  
 220 about Mr. McNally's approach. More telling, however, are the hypothetical data  
 221 at the bottom of the table. These data show that Mr. McNally's approach is

222 entirely wrong. With higher interest rates and various yield curve scenarios, Mr.  
223 McNally's growth rate estimate would be much higher and even more volatile.

224 Q. What long-term growth rate should Mr. McNally have used?

225 A. As explained in my Direct Testimony and have updated in this rebuttal, 6.5  
226 percent is a reasonable rate. Under these circumstances, it would seem difficult to  
227 assign any weight to Mr. McNally's multi-stage growth DCF estimate.

228 Q. What is the indicated ROE from Mr. McNally's multi-stage growth model if a 6.5  
229 percent growth rate is inserted as the third-stage, long-term growth rate in that  
230 model?

231 A. I have prepared that analysis in ComEd Exhibit 29.3. The resulting ROE is 10.73  
232 percent.

233 **C. Response to Mr. McNally's Comments**

234 Q. Please summarize Mr. McNally's comments on your testimony?

235 A. Mr. McNally offers several criticisms of my ROE analysis at pages 29-34 of his  
236 Direct Testimony. On page 30, he summarizes those criticisms saying that the  
237 growth rates in my DCF analyses are unsustainably high based on current  
238 economic growth, that my risk premium analysis is flawed, and that I use  
239 arbitrary weights for my individual models that lead to a recommendation that is  
240 inconsistent with those results.

241 Q. Are Mr. McNally's comments valid?

242 A. No. Mr. McNally's only substantive comments are those concerning the DCF  
243 growth rate. His comments about my bond-yield-plus-risk premium analysis are  
244 irrelevant, since I only offered that analysis for general perspective. His

245 comments about the weightings used to determine my final ROE recommendation  
246 are simply incorrect. I did not use, as McNally claims (Staff Exhibit 4.0, page 34,  
247 line 680-681) "only the high-end of those [DCF] ranges" to establish my ROE  
248 recommendation.

249 Q. How do you respond to Mr. McNally's growth rate contentions?

250 A. Mr. McNally's growth rate comments are based on several erroneous contentions.  
251 First, he criticizes my inclusion of GDP growth in some of my DCF models based  
252 on his view that Energy Information Administration ("EIA") forecasts and his  
253 analysis of Treasury bond yields indicate "expectations of long-term growth in the  
254 overall economy of approximately 5%" (Staff Exhibit 4.0, page 30, line 596). As  
255 I explained above, Mr. McNally's Treasury bond analysis is something of a red  
256 herring with respect to the DCF model. Also, as I will explain in more detail in  
257 my rebuttal of Mr. Gorman, other GDP forecasts, including EIA, contain inflation  
258 projections that are 50 percent below long-run averages and farther below current  
259 inflation levels. When these factors are correctly considered, Mr. McNally's  
260 criticism of my GDP growth rate forecast and its use in portions of my DCF  
261 analysis are without merit.

262 His second growth rate criticism is a back-door effort to re-impose the "b  
263 times r" sustainable growth argument, which the Commission has rejected in prior  
264 cases (see p. 21). His discussion on page 32 and his Staff Exhibit 4.0, Schedule  
265 4.10 are based on a routine "b times r" approach from which he concludes that an  
266 earned ROE of over 21 percent or a retention rate of over 61 percent would be  
267 required to sustain a 6.6 percent growth rate (Staff Exhibit 4.0, page 32, lines 633-

268 637). While these calculations are mechanically correct in a hypothetical steady  
269 state world in which dividends, earnings, book value, stocks price all move in  
270 lockstep, they bear little relationship to the numerous factors that affect investors'  
271 long-term growth rate expectations. A counter example using Mr. McNally's  
272 ROE recommendation illustrates this point. Based on the average retention rate in  
273 his Schedule 4.10 (33.5%) and his 10.3 percent ROE, the implied "b times r"  
274 growth rate is only 3.45 percent ( $33.5\% \times 10.3\% = 3.45\%$ ). Adding that  
275 growth rate to the dividend yield range from his or my comparable group (4.0%-  
276 4.5%) would produce an ROE estimate of only 7.45 percent to 7.95 percent (4.0%  
277 yield + 3.45% growth = 7.45% ROE; 4.5% yield + 3.45% growth = 7.95%). This  
278 level of ROE is less than 200 basis points above ComEd's cost of debt. Such  
279 unreasonably low DCF results have led to rejection of the "b time r" approach,  
280 and, therefore, Mr. McNally's criticisms based on this approach should be  
281 similarly rejected.

282 Finally, Mr. McNally's criticisms of my GDP growth rate have no bearing  
283 on my quarterly constant growth DCF model (upon which the Commission has  
284 consistently relied) because I do not use the GDP growth rate in that model.

285 **IV. Response to IIEC Witness Michael P. Gorman**

286 **A. Summary of Mr. Gorman's ROE Recommendation**

287 Q. How did Mr. Gorman arrive at his 10.2 percent ROE recommendation?

288 A. Mr. Gorman's recommendation is the midpoint of a range between 9.8 percent  
289 and 10.6 percent. The low end of his range is his Two-Stage Growth DCF result  
290 (9.8%). The upper end of his range is the average of his Constant Growth DCF

291 result, his Risk Premium result, and his CAPM result (average of 11.0%, 10.0%,  
292 and 10.7%, respectively equals 10.6%).

293 **B. Comments on Mr. Gorman's Methodology**

294 Q. Did you also update Mr. Gorman's analysis?

295 A. Yes. These results are shown in ComEd Exhibit 29.4, pages 1-6. In ComEd  
296 Exhibit 29.4, page 1, column 1, I summarize Mr. Gorman's ROE results from his  
297 direct testimony (at page 33). In arriving at his ultimate recommendation of 10.2  
298 percent, Mr. Gorman arbitrarily gave heavier weight to his Two-Stage DCF result  
299 and less weight to his other approaches. Had he simply given equal weight to all  
300 four of his model outcomes, he would have found an ROE of 10.4 percent. In this  
301 light, had Mr. Gorman more reasonably considered his own quantitative results  
302 and the other checks of reasonableness that he offers, his ROE estimate would  
303 have higher.

304 The necessary changes to Mr. Gorman's analysis are summarized on  
305 ComEd Exhibit 29.4, page 1, column 2. They indicate that had Mr. Gorman  
306 relied on more reasonable assumptions, he would have found an ROE estimate  
307 very similar, if not higher, than my ROE recommendation of 10.75 percent.

308 Q. What adjustments should be made to Mr. Gorman's DCF and CAPM analyses?

309 A. I did not make any adjustments to Mr. Gorman's Constant Growth DCF and  
310 CAPM models. I updated Mr. Gorman's Two-Stage Growth DCF analysis by  
311 replacing his second stage growth estimate of 5.0 percent with the more realistic  
312 long-term growth projection of 6.5 percent. These results are shown in ComEd

313 Exhibit 29.4, page 2. They indicate a Two-Stage Growth DCF estimate of 11.0  
314 percent.

315 Q. What are the problems with Mr. Gorman's risk premium analysis?

316 A. In his bond yield plus risk premium analysis, he uses the same general approach  
317 that I use, based on allowed regulatory rates of return. In that analysis, however,  
318 he shortens the analysis period and he fails to include the well-documented  
319 tendency for risk premiums to increase when interest rates decline. Without  
320 including this characteristic of risk premiums, his risk premium analysis is not  
321 consistent with recent experience or with sound academic research, such as the  
322 Harris and Marston studies I discussed in my direct testimony. With recent  
323 historically low interest rates, this omission causes him to significantly understate  
324 his risk premium estimates. In addition, his interpretation of his risk premium  
325 analysis appears to be quite improperly subjective in terms of the data he presents.

326 Q. How is Mr. Gorman's risk premium analysis structured?

327 A. Mr. Gorman's risk premium analysis is presented in IIEC Exhibits 2.11 and 2.12.  
328 He discusses the analysis on pages 24-27 of his direct testimony. His analysis  
329 consists of two parts. In one part he adds a Government bond equity risk  
330 premium of 5.15 percent to a projected 30-year Treasury bond yield of 4.6  
331 percent. This produces an ROE of 9.8 percent. In his second approach, he adds a  
332 utility bond risk premium of 3.7 percent to the recent Baa utility bond yield of 6.4  
333 percent. This produces an ROE estimate of 10.1 percent. From these two results,  
334 he concludes that a 10.0 percent ROE is appropriate from his risk premium  
335 analysis.

336 Q. Why do you say that Mr. Gorman's approach is subjective?

337 A. On page 25, at lines 567-568 of his direct testimony, Mr. Gorman explains that 18  
338 of his 22 Treasury bond risk premium observations range between 4.4 percent and  
339 5.9 percent. From this range he selects the approximate midpoint of 5.15 percent  
340 for his Treasury bond analysis. In the following paragraph, he says that his utility  
341 bond risk premiums "...primarily fall in the range of 3.0% to 4.4%...." From this  
342 range he selects the midpoint of 3.7 percent.

343 Q. Why do you disagree with Mr. Gorman's selections in his Treasury bond analysis?

344 A. Without closer inspection, his selections might appear reasonable. In fact, they  
345 are not. What Mr. Gorman fails to explain is that, with the lower interest rates in  
346 recent years, in his own risk premium data since 2000 (see IIEC Exhibit 2.11)  
347 there is *not one* Government bond risk premium as low as the 5.15 percent he  
348 recommends. Indeed, Mr. Gorman excludes from his subjective range the one  
349 observation in 2005 when the Treasury bond yield was closest to the 4.6 percent  
350 projected Government bond rate he finally applies. In 2005, the Treasury bond  
351 rate was 4.65 percent and, based on an average allowed ROE of 10.54 percent, the  
352 indicated risk premium was 5.89 percent. Without any further analysis, these  
353 Treasury bond data show that the Mr. Gorman's risk premium estimates of ROE  
354 should have been in the 10.5 percent range (4.60% Gorman projected Treasury  
355 bond rate + 5.89% 2005 risk premium = 10.49%).

356 Q. Is there a similar problem with Mr. Gorman's utility bond risk premium analysis?

357 A. Yes. Mr. Gorman's IIEC Exhibit 2.12 shows that to find a risk premium as low as  
358 his 3.7 percent one must revert to 2001 when the interest rate on A-rated utility

359 bonds was 7.76 percent. The effect of Mr. Gorman's improper omission of the  
360 inverse risk premium-interest rate relationship can be seen further by comparing  
361 the 7.98 percent average utility interest rate over his 22-year analysis (IIEC  
362 Exhibit 2.12) to the 6.4 percent current Baa rate he uses to estimate ROE. Based  
363 on a 7.98 percent average utility interest rate, the average risk premium was 3.67  
364 percent from his 22-year study. During the only years in that analysis when  
365 interest rates were as low as 6.4 percent (2003-2007), the average risk premium  
366 was 4.5 percent. Had Mr. Gorman simply used this more recent risk premium for  
367 consistency with his low 6.4 percent utility interest rate, he would have found an  
368 ROE of 10.9 percent ( $6.4\% + 4.50\% = 10.9\%$ ). These comparisons show that Mr.  
369 Gorman's risk premium data actually support an ROE range of 10.5 percent to  
370 11.0 percent.

371 Q. In your risk premium analysis from your direct testimony, you used a standard  
372 regression analysis to account for the inverse relationship between risk premiums  
373 and interest rates. What does Mr. Gorman's risk premium analysis indicate when  
374 this approach is applied to his data?

375 A. In ComEd Exhibit 29.4, pages 3-6, I have applied the standard regression analysis  
376 to calculate "interest rate adjustment" factors for his two risk premium studies.  
377 This approach properly takes into account the inverse relationship between equity  
378 risk premiums and interest rates. Using this analysis, Mr. Gorman's Treasury  
379 bond risk premium indicates an ROE of 10.4 percent. For his utility bond risk  
380 premium, the indicated ROE is 10.7 percent. These results further confirm that

381 Mr. Gorman's risk premium data support an ROE in the range of 10.5 percent to  
382 10.75 percent.

383 Q. Has Mr. Gorman previously recognized the inverse risk premium-interest rate  
384 relationship?

385 A. Yes. In his testimony before the Public Utility of Commission of Texas in Docket  
386 No. 14965, page 15, lines 10-13, Mr. Gorman stated:

387 The results of my study indicate an inverse relationship between a  
388 bond's real return and the equity risk premium. This result is  
389 consistent with the findings of published studies which indicate  
390 equity risk premiums move inversely with interest rates.

391 Had Mr. Gorman made a similar adjustment in this case, his risk premium results  
392 would have indicated an ROE considerably higher than the one he recommends.

393 **C. Response to Mr. Gorman's Comments**

394 Q. Please summarize Mr. Gorman's comments on your testimony.

395 A. Mr. Gorman's criticisms are centered in three areas. He alleges that my estimate  
396 of GDP growth is too high, the Treasury rates I used in my CAPM analysis are  
397 too high, and my risk premium analysis is not reasonable.

398 Q. How do you respond to Mr. Gorman's criticisms of your GDP growth rate?

399 A. I addressed the GDP growth rate issue in my Direct Testimony and in my  
400 discussion of Mr. McNally's testimony above. I would reiterate that my updated  
401 Constant Growth DCF results of 10.2 percent to 10.8 percent and my Quarterly  
402 DCF results of 10.3 percent to 11.1 percent do not include GDP growth as a  
403 component in either analysis.

404 Q. How do you respond to Mr. Gorman's criticisms of your CAPM analysis?

405 A. I have updated my CAPM analysis in ComEd Exhibit 29.8 which shows an ROE  
406 result of 10.1 percent. Mr. Gorman attempts to update my CAPM analysis and  
407 arrives at a result of 9.76 percent. The problem with Mr. Gorman's criticism of  
408 my CAPM analysis is that he uses stale interest rate forecasts and relies on a  
409 short-term CAPM approach which is not applicable in the current interest rate  
410 environment. In redoing my long-term CAPM analysis, Mr. Gorman uses a long-  
411 term Treasury bond yield forecast of 4.6 percent. However, as I show in ComEd  
412 Exhibit 29.1, the most recent forecast for long-term Treasury rates is 5.1 percent.  
413 As ComEd Exhibit 29.8 shows, when this rate is considered the long-term CAPM  
414 result is 10.1 percent. I did not redo my short-term CAPM analysis because there  
415 is too much turmoil in the short-term interest rate market for this approach to have  
416 any credibility. The Federal Reserve Bank continues to lower the Fed Funds rate  
417 in response to a perceived worsening of the economy. This leads to a "flight to  
418 safety" among investors which puts even more downward pressure on short-term  
419 interest rates. Until this situation is resolved, it is not appropriate to rely on short-  
420 term CAPM results that include unstable short-term Treasury bill rates.

421 Q. How do you respond to Mr. Gorman's criticisms of your risk premium analysis?

422 A. I find Mr. Gorman's comments concerning my risk premium analyses to be  
423 surprising since he relied on virtually the same approach in his direct testimony.  
424 He uses commission-authorized returns to determine his risk premiums and then  
425 applies them to both projected and current interest rates. The primary differences  
426 between our approaches is that my historical timeframe is longer (my data goes  
427 back to 1980, Mr. Gorman's to 1986) and I take into account the inverse

428 relationship between interest rate levels and equity risk premiums (which Mr.  
429 Gorman has also done in previous cases). Furthermore, as I noted in my rebuttal  
430 of Mr. McNally, comments about my bond-yield-plus-risk premium analysis do  
431 not impact my recommendation because I only offered that analysis for general  
432 perspective.

433 **V. Response to CUB Witness Christopher C. Thomas**

434 **A. Summary of Mr. Thomas' ROE Recommendation**

435 Q. What is the basis for Mr. Thomas' 7.77 percent ROE recommendation?

436 A. He derives his recommendation entirely from the annual version of the constant  
437 growth DCF model, which the Commission has previously rejected (North Shore  
438 and Peoples Gas, Docket Nos. 07-0241 and 07-242 Cons., at 99). His growth rate  
439 in that model is based entirely on the "b times r" sustainable growth rate  
440 approach, which the Commission has also previously rejected (GTE North,  
441 Docket Nos. 93-0301, 94-0041). The "b times r" method as applied by Mr.  
442 Thomas produces a growth rate of only 3.09 percent. When this low growth rate  
443 is added to the projected dividend yield for his comparable group (4.68%), it  
444 produces the exceptionally low ROE that Mr. Thomas recommends. He also  
445 provides a CAPM analysis, which he offers as support for his DCF result. In his  
446 CAPM analysis, the risk-free rate is based on the 30-year Treasury bond interest  
447 rate (4.35%). He uses "raw" or unadjusted beta coefficients that average 0.71,  
448 which the Commission has previously rejected (North Shore and Peoples Gas,  
449 Docket Nos. 07-0241 and 07-242 Cons., at 99). His market risk premium is 5  
450 percent. These data produce a CAPM estimate of 7.9 percent.

451 **B. Comments on Mr. Thomas' Methodology**

452 Q. What is your assessment of Mr. Thomas' DCF and CAPM analyses?

453 A. Mr. Thomas' analyses and final recommendation far understate the cost of equity  
454 capital. Both his DCF estimate at 7.77 percent and his CAPM estimate at 7.9  
455 percent are less than 200 basis points above ComEd's cost of debt. As I  
456 demonstrated in the analysis in my Direct Testimony (ComEd Exhibit 10.3) the "b  
457 times r" growth rates are exceptionally low. Particularly, the historical growth  
458 rates derived from the 2002-2006 time period used by Mr. Thomas are negatively  
459 skewed by restructuring costs and dividend policy shifts that have occurred in the  
460 utility industry. For Mr. Thomas to rely solely on such data for his DCF growth  
461 rate is incorrect and, accordingly, it produces an unreasonably low ROE estimate.  
462 Similarly, Mr. Thomas' CAPM analysis is negatively biased by his use of  
463 unadjusted beta coefficients that are much lower than the widely followed data  
464 published by *Value Line*. These factors should lead the Commission to again  
465 reject Mr. Thomas' ROE recommendations.

466 **C. Response to Mr. Thomas' Comments**

467 Q. At pages 34-35, Mr. Thomas criticizes your use of GDP growth rates in portions  
468 of your DCF analysis. How do you respond to these criticisms?

469 A. As I explained in my Direct Testimony, many of the traditional sources for DCF  
470 growth rates have become extremely volatile and, particularly those often relied  
471 upon from Value Line, have been very low relative to prior time periods. In this  
472 context, I have recommended consideration of the long-term nominal GDP  
473 growth rate. As shown in my updated forecast in ComEd Exhibit 29.5, that

474 estimate is currently 6.5 percent. I use long-term GDP data because, unlike  
475 analysts' forecasts, that data produces a consistent and stable growth rate as  
476 required by the assumptions of the DCF model. However, as I also explained in  
477 my Direct Testimony, I understand that the Commission did not accept my GDP  
478 forecast in ComEd's prior case as a sole source for the DCF growth rate. In that  
479 context, in the present case I have presented both analysts' growth rate forecasts  
480 and GDP forecasts. In my updated quarterly DCF analysis (ComEd Exhibit 29.7),  
481 I use only analysts' growth rates with no GDP growth at all. The ROE range from  
482 that analysis is 10.3 percent to 11.1 percent, with a midpoint of 10.7 percent.  
483 Based on these results, Mr. Thomas' criticism of my growth rate estimates is  
484 without merit.

485 **VI. Response to the Contention that ComEd's Rate of Return Should be Reduced**  
486 **if the Commission Approves Riders SMP and SEA**

487 Q. What is your response to the Mr. Gorman's and Mr. Thomas' recommendations  
488 concerning Riders SMP and SEA?

489 A. Mr. Gorman recommends that his ROE should be reduced by 50 basis points (to  
490 9.7%) if the Riders are adopted by the Commission. He provides no analysis to  
491 support the amount of his negative adjustment and his brief, three-sentence  
492 explanation is that the Riders would shift risks away from ComEd and onto its  
493 customers (IIEC Exhibit 2.0 at 35, lines 779-783). As I understand from the  
494 testimony provided by Company witnesses Mr. Mitchell, Mr. Williams, Ms. Clair,  
495 and Mr. Crumrine (ComEd Exhibits 1.0, 4.0, 6.0, and 11.0, respectively),  
496 ComEd's proposal for a system modernization projects ("SMP") rider and storm  
497 expense adjustment ("SEA") rider would provide significant benefits to

498 customers. Particularly Rider SEA would, in fact, balance customer and  
499 Company risks by assuring that there is no over- or under-recovery of storm  
500 expenses. For Mr. Gorman to recommend a large reduction to ComEd's allowed  
501 rate of return with no analysis to support his recommendation is simply  
502 inappropriate.

503 Mr. Thomas' recommendation to provide a debt-only rate of return for  
504 projects covered by Rider SMP is similarly inappropriate. If the purpose for the  
505 system modernization proposal were to expedite and accelerate such projects, it  
506 would make little economic sense for those very projects to receive a substandard  
507 rate of return. Like Mr. Thomas' other extreme rate of return recommendations,  
508 his debt-only rate of return recommendation for Rider SMP investments should be  
509 rejected.

510 **VII. Update of ROE Estimates**

511 Q. What are the results of your updated DCF analyses?

512 A. My updated DCF results are shown in ComEd Exhibits 29.6 and 29.7. In both of  
513 these exhibits, I rely on a 25-company comparable group that contains the same  
514 companies I used in my Direct Testimony, less two companies that are now being  
515 acquired (Energy East and Puget Energy). In ComEd Exhibit 29.6, I present the  
516 updated results for the annual versions of the DCF model. Those updates apply  
517 current versions of the same analysts' and GDP growth rates I used in my direct  
518 testimony. The indicated DCF range is 10.2 percent to 10.9 percent. The  
519 quarterly version of the constant growth model, with growth rates based solely on

520 analysts' estimates, is shown in ComEd Exhibit 29.7. The reasonable range from  
521 my updated quarterly DCF analysis is 10.3 percent to 11.1 percent.

522 Q. What are the results of your updated CAPM analysis?

523 A. The results of that analysis are shown in ComEd Exhibit 29.8. The indicated  
524 ROE from the CAPM analysis based on a long-term Treasury bond risk-free rate  
525 is 10.1 percent.

526 Q. What are the results of your updated risk premium analysis?

527 A. My updated risk premium analysis is presented in ComEd Exhibit 29.9. Based on  
528 currently projected Baa utility interest rates for 2009 (which are slightly lower  
529 than current Baa utility rates shown previously in Table 1), the electric utility risk  
530 premium analysis indicates an ROE of 10.81 percent. The updated gas LDC risk  
531 premium analysis indicates an ROE of 10.72 percent. The updated results of the  
532 Ibbotson risk premium analysis and the Harris-Marston risk premium analysis  
533 indicate ROEs of 11.0 percent ( $6.5\% + 4.5\% = 11.0\%$ ) and 12.0 percent ( $6.5\% +$   
534  $5.13\% = 11.3\%$ ), respectively. As noted in my Direct Testimony, the Ibbotson  
535 and Harris-Marston results are not used in my ROE estimates, but are presented  
536 for general perspective on overall capital market costs.

537 Q. What do you conclude from your updated ROE analyses?

538 A. My updated analyses show that ComEd's requested 10.75 percent ROE is  
539 reasonable. My conclusions are also supported by the interest rate risk associated  
540 with projections for higher rates over the coming year and the ongoing risks and  
541 uncertainties that exist in the electric utility industry as well as the specific risks  
542 that ComEd continues to face.

543 Q. Does this conclude your rebuttal testimony?

544 A. Yes, it does.