

Exhibit No.____(SCH-10T)
Docket UE-130043
Witness: Samuel C. Hadaway

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v.

PACIFICORP d/b/a
Pacific Power & Light Company

Respondent.

Docket UE-130043

PACIFICORP

REBUTTAL TESTIMONY OF SAMUEL C. HADAWAY

August 2, 2013

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ATTACHED EXHIBITS

Exhibit No.__(SCH-11) – Comparable Company Fundamental Characteristics

Exhibit No.__(SCH-12) – Capital Market Data

Exhibit No.__(SCH-13) – Update of Gorman Risk Premium Analysis

Exhibit No.__(SCH-14) – GDP Growth Rate Forecast

Exhibit No.__(SCH-15) – Discounted Cash Flow Analysis

Exhibit No.__(SCH-16) – Risk Premium Analysis

1 **Q. Are you the same Samuel C. Hadaway that previously submitted direct**
2 **testimony on behalf of PacifiCorp d/b/a Pacific Power & Light Company**
3 **(PacifiCorp or Company) in this case?**

4 A. Yes.

5 **PURPOSE AND SUMMARY**

6 **Q. What is the purpose of your rebuttal testimony?**

7 A. The purpose of my rebuttal testimony is to respond to the rate of return on equity
8 (ROE) recommendations offered by Washington Utilities and Transportation
9 Commission (Commission) Staff witness Mr. Kenneth L. Elgin and Boise White
10 Paper, L.L.C. (Boise) witness Mr. Michael P. Gorman. In my analysis, I will
11 demonstrate that their rate of return recommendations do not reflect PacifiCorp's cost
12 of equity capital (COE) because they do not account for the current increasing interest
13 rate environment or the ongoing effects of the recent economic turbulence that has
14 occurred. I will demonstrate that when these factors are more reasonably considered,
15 the other parties' rate of return recommendations are easily seen to be too low. I will
16 also respond to the other witnesses' comments on the methodology I used in my
17 direct testimony to estimate PacifiCorp's COE. Finally, I will update my COE
18 analysis for current market costs and conditions and demonstrate that while the results
19 of the models have shifted in response to recent changes in the capital markets, they
20 continue to support my recommendation that the Commission set PacifiCorp's
21 allowed return on equity (ROE) at 10.0 percent.

1 **REVIEW OF OTHER PARTIES' RECOMMENDATIONS**

2 **Q. What are the parties' ROE recommendations?**

3 A. Mr. Elgin recommends an ROE of only 9.0 percent. Mr. Gorman recommends an
4 ROE of only 9.2 percent. For perspective, and as I will discuss in more detail later,
5 these ROE recommendations are far below recently allowed ROEs for other similarly
6 situated integrated electric utilities like PacifiCorp. Such low ROE recommendations,
7 especially when combined with Mr. Elgin's and Mr. Gorman's equity-thin,
8 hypothetical capital structures, produce a punitively low overall rate of return result.
9 As I will demonstrate in my updated COE analysis, the Company's requested 10.0
10 percent ROE continues to be supported by my analysis, and especially by the
11 increasing interest rate environment that now exists. All these factors show that Mr.
12 Elgin's and Mr. Gorman's rate of return recommendations are unreasonably low and
13 should be rejected by the Commission.

14 **Q. What is your general assessment of Mr. Elgin's and Mr. Gorman's ROE**
15 **recommendations?**

16 A. Mr. Elgin's and Mr. Gorman's recommendations are well below PacifiCorp's market
17 COE. Their recommendations are much lower than the most recently allowed ROEs
18 for other electric utilities in the state of Washington and around the country. In the
19 most recent cases for both Avista Corporation d/b/a Avista Utilities (Avista) and
20 Puget Sound Energy (PSE), the Commission approved ROEs of 9.8 percent.¹
21 Similarly, the most recent data from Regulatory Research Associates shows that

¹ *Wash. Utils. & Transp. Comm'n v. Avista Corp. d/b/a Avista Utils.*, Dockets UE-120436 and UG-120437, Order 09, Dockets UE-110876 and UG-110877, Order 14, ¶ 74 (Dec. 26, 2012); and *WUTC v. Puget Sound Energy, Inc.*, Dockets UE-121697 and UG-121705, Order 07, and Dockets UE-130137 and UG-130138, Order 07, ¶ 58 (June 25, 2013).

1 during the first two quarters of 2013, the average allowed ROE for integrated electric
2 utilities like PacifiCorp was 9.8 percent.² I will show that Mr. Elgin's and Mr.
3 Gorman's analyses are faulty because they are based on negatively biased model
4 inputs and they fail to reasonably consider the current increasing interest rate
5 environment. Additionally, I will provide updated data and analysis, which show that
6 PacifiCorp's current COE remains approximately 10.0 percent. These factors
7 demonstrate that Mr. Elgin's and Mr. Gorman's ROE recommendations are
8 unreasonably low.

9 ECONOMIC AND MARKET CONDITIONS

10 **Q. What are the economic factors that have led to the current rising interest rate**
11 **environment?**

12 A. The U.S. economy is finally on what appears to be a sustainably improving track.
13 The housing markets in many parts of the country have firmed up and prices are
14 rising. The stock market has largely recovered from its losses during the financial
15 crisis and consumer confidence is improving. Although unemployment remains a
16 concern, most economists now expect the government's monetary policy to become
17 less stimulative over the coming year.

18 In this regard, on June 19, 2013, the Federal Reserve System (Fed) Federal
19 Open Market Committee (FOMC) issued the following policy statement indicating
20 somewhat improved economic conditions:

21 Information received since the Federal Open Market Committee met in
22 May suggests that economic activity has been expanding at a moderate
23 pace. **Labor market conditions have shown further improvement**
24 **in recent months, on balance, but the unemployment rate remains**
25 **elevated. Household spending and business fixed investment**

²Regulatory Research Associates, Regulatory Focus, July 9, 2013; Exhibit No.__(SCH-11) at page 2.

1 **advanced, and the housing sector has strengthened further,** but
2 fiscal policy is restraining economic growth. Partly reflecting
3 transitory influences, inflation has been running below the
4 Committee’s longer-run objective, but longer-term inflation
5 expectations have remained stable.

6 Consistent with its statutory mandate, the Committee seeks to foster
7 maximum employment and price stability. The Committee expects
8 that, with appropriate policy accommodation, economic growth will
9 proceed at a moderate pace and the unemployment rate will gradually
10 decline toward levels the Committee judges consistent with its dual
11 mandate. **The Committee sees the downside risks to the outlook for**
12 **the economy and the labor market as having diminished since the**
13 **fall.** The Committee also anticipates that inflation over the medium
14 term likely will run at or below its 2 percent objective.

15 The Committee will closely monitor incoming information on
16 economic and financial developments in coming months. The
17 Committee will continue its purchases of Treasury and agency
18 mortgage-backed securities, and employ its other policy tools as
19 appropriate, until the outlook for the labor market has improved
20 substantially in a context of price stability. The Committee is prepared
21 to increase or reduce the pace of its purchases to maintain appropriate
22 policy accommodation as the outlook for the labor market or inflation
23 changes. In determining the size, pace, and composition of its asset
24 purchases, the Committee will continue to take appropriate account of
25 the likely efficacy and costs of such purchases as well as the extent of
26 progress toward its economic objectives.³

27 In the highlighted portions of its June 19, 2013 comments, the FOMC noted
28 the economy’s improving conditions.

29 **Q. How did the capital markets respond to the FOMC announcement?**

30 A. The FOMC’s slightly changed stance led to expectations for less
31 accommodative monetary policy, which in turn produced a significant
32 increase in long-term interest rates and a sharp drop in utility stock prices in
33 May and June 2013.

³ FOMC Press Release, www.federalreserve.gov, June 19, 2013 (emphasis added).

1 **Q. In your direct testimony, you provided data to illustrate interest rate trends and**
 2 **the spreads between U.S. Treasury bond and single-A rated utility bonds. Have**
 3 **you updated that information?**

4 A. Yes. I provide that data on page 1 of Exhibit No.____(SCH-12). Table 1 below
 5 summarizes the results.

Table 1
Long-Term Interest Rate Trends

Month	Single-A Utility Rate	30-Year Treasury Rate	Single-A Spread
Jul-10	5.26	3.99	1.27
Aug-10	5.01	3.80	1.21
Sep-10	5.01	3.77	1.24
Oct-10	5.10	3.87	1.23
Nov-10	5.37	4.19	1.18
Dec-10	5.56	4.42	1.14
Jan-11	5.57	4.52	1.05
Feb-11	5.68	4.65	1.03
Mar-11	5.56	4.51	1.05
Apr-11	5.55	4.50	1.05
May-11	5.32	4.29	1.03
Jun-11	5.26	4.23	1.03
Jul-11	5.27	4.27	1.00
Aug-11	4.69	3.65	1.04
Sep-11	4.48	3.18	1.30
Oct-11	4.52	3.13	1.39
Nov-11	4.25	3.02	1.23
Dec-11	4.33	2.98	1.35
Jan-12	4.34	3.03	1.31
Feb-12	4.36	3.11	1.25
Mar-12	4.48	3.28	1.20
Apr-12	4.40	3.18	1.22
May-12	4.20	2.93	1.27
Jun-12	4.08	2.70	1.38
Jul-12	3.93	2.59	1.34
Aug-12	4.00	2.77	1.23
Sep-12	4.02	2.88	1.14
Oct-12	3.91	2.90	1.01
Nov-12	3.84	2.80	1.04
Dec-12	4.00	2.88	1.12
Jan-13	4.15	3.08	1.07
Feb-13	4.18	3.17	1.01
Mar-13	4.20	3.16	1.04
Apr-13	4.00	2.93	1.07
May-13	4.17	3.11	1.06
Jun-13	4.53	3.40	1.13
3-Mo Avg	4.23	3.15	1.09
12-Mo Avg	4.08	2.97	1.11

Sources: Mergent Bond Record (Utility Rates); www.federalreserve.gov
 (Treasury rates). Three month average is for April-June 2013.
 Twelve month average is for July 2012-June 2013.

1 The data in Table 1 partially reflect the increase in interest rates that has occurred
2 since the June 19, 2013 FOMC announcement, with the June 2013 average rates for
3 both long-term utility bonds and the 30-year Treasury bond at the highest levels since
4 August 2011.

5 **Q. Have long-term interest rates moved up further relative to the June 2013**
6 **averages?**

7 A. Yes. The June average rate contains about three weeks of data from before the
8 FOMC announcement. Although a changed Fed posture had been partially
9 anticipated in slightly higher interest rate levels, the June 19, 2013 announcement
10 caused a further jump. While I normally rely on the monthly averages and generally
11 base my analysis on three-month averages to smooth out random fluctuations, when a
12 significant policy shift occurs, I believe the most current data may be instructive.
13 Therefore, on page 2 of my Exhibit No.____(SCH-12), I provide the July 12, 2013 spot
14 yield for long-term single-A utility bonds. That yield, at 4.76 percent, illustrates a
15 53 basis point increase in the single-A yield relative to the three-month average
16 I normally use in my risk premium analysis. Under these circumstances, as I will
17 explain later, I also provide a risk premium update based on the July spot yield.

18 **Q. What do interest rate forecasts show for the coming year?**

19 A. Interest rates are expected to rise further. On page 3 of my Exhibit No.____(SCH-12),
20 I provide the forward Bloomberg curve for Treasury yields through December 31,
21 2014. These forecasts reflect the significant further increases in interest rates that are
22 expected. These data are summarized in Table 2 below.

Table 2
Interest Rate Forecast

	June 2013	Dec 2014E
1-Yr. Treasuries	0.1%	1.0%
10-Yr. Treasuries	2.3%	3.1%
30-Yr. Treasuries	3.4%	3.9%

Source: www.federalreserve.gov (June rates) and Bloomberg Active Treasuries, July 9, 2013.

1 The Bloomberg data show that Treasury rates are expected to rise by 50 basis points
2 or more relative to their average levels for June 2013.

3 **Q. How have the shifting signals on Fed monetary policy and rising interest rates**
4 **impacted utility stock prices?**

5 A. The market re-priced utility stocks lower in May and June 2013. More recently, stock
6 prices recovered somewhat as the Fed calmed fears of an imminent end to its bond-
7 buying program that has artificially depressed interest rates. But the Fed did not
8 remove the threat that it will allow interest rates to rise as the economic recovery
9 continues. As a result, interest rates appear to have settled at new, higher levels. In
10 July 2013, S&P Capital IQ recommended underweighting the S&P 500 Utilities
11 sector, concluding that “this high-yielding, interest rate-sensitive sector will
12 underperform as markets accelerate the expected Fed QE tapering timeline and
13 interest rates head higher, reducing the appeal of equity income.”⁴

14 **Q. How do the other parties’ ROE recommendations in this case compare to the**
15 **rates of return authorized by other state utility commissions around the**
16 **country?**

17 A. They are substantially lower. Over the past five years, average allowed ROEs have

⁴Exhibit No.__(SCH-12) at page 4.

1 ranged between 10.6 percent to 9.8 percent. Table 3 below summarizes the ROE data
2 for integrated electric utilities like PacifiCorp.

Table 3
Authorized Equity Returns for Vertically Integrated Electric Utilities

	2009	2010	2011	2012	2013*
Average ROE	10.63%	10.38%	10.24%	10.10%	9.84%

Source: Regulatory Focus, SNL Regulatory Research Associates, Major Rate Case Decisions, July 9; 2013 and Exhibit No.____(SCH-11), page 2.

*2013 average is for first two quarters only.

3 The 9.0 percent and 9.2 percent ROEs recommended by Mr. Elgin and Mr. Gorman
4 are in stark contrast to the COE deemed appropriate by state regulators around the
5 country.

REBUTTAL OF STAFF WITNESS KENNETH L. ELGIN

7 **Q. What is the basis for Mr. Elgin’s 9.0 percent ROE?**

8 A. Mr. Elgin relies primarily on the traditional constant growth DCF model. He also
9 mentions CAPM and risk premium analyses, but he does not include results for these
10 methods in his final recommendation. From his DCF analysis, he finds a range of
11 8.5 percent to 9.0 percent.⁵ While he does not perform an independent CAPM or risk
12 premium analysis, he acknowledges that the CAPM produces a range of 7.55 percent
13 to 8.25 percent,⁶ and states that he believes the risk premium (4.5%) implied by his
14 9.0 percent ROE recommendation is “more than adequate”.⁷

⁵ Exhibit No.____(KLE-1T) at page 36, lines 7-8.

⁶ *Id.* at 34, lines 2-3.

⁷ *Id.* at 36, lines 1-2.

1 **Q. What is your general impression of Mr. Elgin’s testimony?**

2 A. I disagree with Mr. Elgin’s interpretation of current economic conditions, I disagree
3 with his comparable company selections, and I disagree with the growth rates he uses
4 in his DCF model. Contrary to Mr. Elgin’s discussion, economic conditions are
5 improving and interest rates are increasing. Mr. Elgin is also overly selective in his
6 comparable company selections. His proxy group, made up of only eight companies,
7 is too small to be statistically reliable, and, as is obvious from his own discussion, the
8 Commission has noted this problem with his analysis in prior cases. Finally, while
9 Mr. Elgin discusses various growth rate methodologies, he relies principally on
10 internal growth rates and growth in book value. As I will explain, his criticism of
11 analysts’ growth rates is out of sync with methods used by most regulatory
12 economists and entirely contrary to Mr. Gorman’s discussion of analysts’ growth
13 rates. All these factors lead to inappropriately lower outcomes in Mr. Elgin’s
14 analysis.

15 **Q. Why do you disagree with Mr. Elgin’s discussion of current economic**
16 **conditions?**

17 A. Mr. Elgin summarizes his view of the economy’s impact on page 8. In that
18 conclusion he states: “My general conclusion is that the current macro-economic
19 climate will continue. The Federal Reserve has been explicit that its monetary policy
20 is designed to stimulate economic activity and will continue for the foreseeable
21 future.”⁸

⁸ Exhibit No.__(KLE-1T) at page 8.

1 **Q. Is Mr. Elgin’s conclusion consistent with current Fed policy?**

2 A. No. Some market analysts had predicted in May and early June that the Fed
3 stimulative monetary policy might be tapered down and this caused downward
4 pressure on utility stock prices during this period. Mr. Elgin, in his testimony filed on
5 June 21, 2013, did not include any discussion on potential Fed policy changes or the
6 effects of the previously discussed FOMC announcement on June 19, 2013. His
7 economic conclusions and his conclusions that low interest rates will continue in the
8 rate effective period are incorrect and are therefore not a reasonable foundation for
9 his analysis and resulting low ROE recommendation.

10 **Q. How did Mr. Elgin select his eight-company proxy group?**

11 A. He began with my 14-company group and then eliminated six of the comparable
12 companies.

13 **Q. Do you agree with Mr. Elgin’s rationale for selecting a smaller group?**

14 A. No. As noted above, a small proxy group can lead to statistical concerns and, at
15 times, to criticism for selectivity bias. While I obviously do not disagree with the
16 eight companies Mr. Elgin selected from my group, I do believe that his selection
17 criteria are subjective and unnecessarily restrictive. PacifiCorp is a large, diverse
18 electric utility. If its shares were publicly traded, they would likely be held by the
19 same large institutions and long-term individual investors that hold most utility
20 stocks. For this reason, most regulatory economists use broadly based proxy groups
21 with similar risks and no extraordinary operating characteristics relative to the subject
22 company.⁹ While it is not possible to pick a perfect comparable company group,

⁹ See Exhibit No.____(SCH-1T) at pages 3-4 for proxy group selection criteria.

1 Mr. Elgin ends up with too small a group and offers criticisms of my group that are
2 not major concerns to investors.

3 **Q. Does Boise witness Mr. Gorman agree with your proxy group selection?**

4 A. Generally. As I will explain in my rebuttal of Mr. Gorman, he accepts my group, but
5 removes Teco Energy because Teco has recently acquired New Mexico Gas
6 Company.

7 **Q. How does Mr. Elgin determine the growth rate in his DCF model?**

8 A. Mr. Elgin discusses DCF growth rate selections at pages 26-32 of his testimony. He
9 concludes that investors can reasonably expect a long-term growth in dividends in the
10 range of 4.0 percent to 4.5 percent.¹⁰ Interestingly, Mr. Elgin's recommended long-
11 term growth rate in the present case is 50 basis points lower than he found for a
12 similarly small comparable group in the prior PacifiCorp case in which ROE was
13 litigated before the Commission.¹¹ Although Mr. Elgin discusses numerous
14 alternatives for growth rate data, he ultimately relies on Value Line's projected
15 growth in book value and so-called internal or "b times r" growth.

16 **Q. Do you believe that the "b times r" growth rate methodology is an appropriate
17 means to estimate future dividend growth in a DCF model?**

18 A. No. Because of the circularity and volatile nature of the "b times r" approach, most
19 regulatory economists do not use it. The "b times r" approach has generally been
20 rejected because it fails to include growth rate sources beyond earnings retention and
21 new common stock sales above book value, and because the method itself is circular.
22 The method is circular because the "r" in the "b times r" portion of the formula is the

¹⁰ Exhibit No.__(KLE-1T) at page 32, lines 18-19.

¹¹ Docket UE-100749, Testimony of Kenneth L. Elgin, Exhibit No.__(KLE-1T) at page 38, lines 9-10.

1 rate of return that utility companies are expected to earn. And the earned rate of
2 return is itself in large part determined by the allowed rate of return in regulatory
3 proceedings. The “b times r” result, therefore, depends on the allowed rate of return
4 and, if the “b times r” approach is used in the regulatory process, the allowed rate of
5 return depends on the rate of return expected to be earned by the utility.

6 **Q. Mr. Elgin claims that your testimony contains evidence that criticizes analysts’
7 growth estimates as being overly optimistic.¹² Is this a legitimate criticism of
8 analyst’s growth rate estimates for utility companies?**

9 A. No. While I would agree that some analysts’ estimates for high tech companies were
10 overstated during the tech market bubble of the late 1990s, and that those analysts
11 were severely criticized, I have not seen convincing evidence that analysts have been
12 optimistic about *utility growth rates*. Mr. Elgin’s quotation is taken out of context
13 from an academic article that supports using GDP growth rates in the DCF model.
14 It does not support his contention that analysts’ estimates should not be used to assess
15 investors’ long-term growth rate expectations.

16 **Q. What does Boise witness Mr. Gorman have to say about using analysts’ growth
17 rate estimates in the DCF model?**

18 A. Mr. Gorman states, “As predictors of future returns, security analysts’ growth
19 estimates have been shown to be more accurate than growth rates derived from
20 historical data.”¹³

¹² Exhibit No.__(KLE-1T) at page 49, lines 1-4.

¹³ Exhibit No.__(MPG-1T) at page 20, lines 13-14.

1 **Q. Mr. Elgin critiques your 5.7 percent GDP growth rate forecast.¹⁴ Are his**
2 **criticisms valid?**

3 A. No. As I explained in my direct testimony, there are several reasons why my GDP
4 growth estimate is appropriate as one estimate of investors' long-term growth rate
5 expectations in the DCF model. As in essentially all econometric forecasts, I used
6 historical data, as reported by the St. Louis Federal Reserve Bank, to develop my
7 GDP growth estimate. However, my GDP forecast is not a historical average.¹⁵ The
8 average historical growth rate for the 60 years in my update study¹⁶ is 6.5 percent;
9 whereas my forecast for the future is 5.6 percent. My forecast is lower because I give
10 more weight to the more recent years. For gauging investors' long-term expectations,
11 this is an appropriate approach. Finally, the Congressional Budget Office's estimate
12 of GDP growth¹⁷ for the next 10 years at 4.3 percent is an unreasonably low estimate
13 of the long-run future because it is dominated by recent economic turmoil (real
14 growth of 2.3%) and a low inflation rate (2.0%) that has resulted. Such permanently
15 low estimates of real growth and inflation would mean that the future U.S. economy
16 will grow at rates that are more than two percentage points lower than the historical
17 average (6.5% - 4.3% = 2.3%). While future prospects for the country may have been
18 dampened by recent economic performance, permanently low growth rates are not
19 reasonable assessments of investors' long-term expectations to be used in the DCF

¹⁴ Exhibit No.__(KLE-1T) at pages 50-54.

¹⁵ In PacifiCorp's 2005 general rate case, the Commission found that GDP growth rates used in the DCF model should be forward looking, rather than an historical average. *Wash. Utils. & Transp. Comm'n v. PacifiCorp d/b/a/Pacific Power & Light Company*, Docket UE-050684, Order 4, ¶ 261 (April 17, 2006). As I explain above, my approach conforms to this directive, and Mr. Elgin is incorrect that my GDP growth rate is not a forward-looking estimate.

¹⁶ Exhibit No.__(SCH-14) at page 1.

¹⁷ *Id.* at 2.

1 model. My 5.6 percent growth forecast is consistent with a more balanced view of
2 long-term future prospects.

3 **Q. Please summarize your rebuttal of Mr. Elgin's ROE recommendation.**

4 A. Mr. Elgin's ROE recommendation is far below PacifiCorp's COE. He appears to
5 mistakenly believe that the COE has declined since the Commission most recent ROE
6 decisions and that interest rates are expected to remain low. This conclusion is
7 incorrect. Fed policy has moderated and interest rates have increased and are
8 expected to rise more in the coming year. His analysis is limited and contrary to
9 direction provided in prior Commission orders. For these reasons, his analysis and
10 the conclusions he draws from that analysis provide little meaningful evidence about
11 PacifiCorp's COE.

12 **REBUTTAL OF BOISE WITNESS MICHAEL P. GORMAN**

13 **Q. What is the basis for Mr. Gorman's 9.20 percent ROE recommendation?**

14 A. Based on three DCF models (two constant growth models and one multi-stage growth
15 model), a risk premium analysis, and the CAPM, Mr. Gorman concludes that the
16 reasonable ROE range is 9.1 percent to 9.25 percent.¹⁸ His recommended ROE of 9.2
17 percent falls within this range.

18 **Q. Mr. Gorman compares his 9.2 percent ROE recommendation in this case to**
19 **PacifiCorp's last authorized ROE of 9.8 percent. He claims that his lower**
20 **recommendation is justified due to a drop in capital market costs that has**
21 **occurred since PacifiCorp's last case.¹⁹ Do you agree?**

22 A. No. Mr. Gorman's conclusion is incorrect because he does not consider the increase

¹⁸ See Exhibit No.____(MPG-1T) at page 39, line 12.

¹⁹ *Id.* at pages 3-4.

1 in interest rates that has occurred since the Fed began signaling an end to its
2 quantitative easing program. As shown in both page 1 of my Exhibit No.____(SCH-
3 12) and Table 1 of Mr. Gorman's testimony, around the time of the February 2012
4 settlement of PacifiCorp's 2011 Washington Rate Case (Docket UE-111190), interest
5 rates for single-A utilities were approximately 4.35 percent. As discussed previously,
6 the average single-A rate for June 2013 was above 4.5 percent, and, most recently, in
7 July, rates have been closer to 4.8 percent. Because the premise of Mr. Gorman's
8 recommendation reducing PacifiCorp's allowed ROE is incorrect, his
9 recommendation should be rejected.

10 **Q. What is your technical assessment of Mr. Gorman's ROE testimony and**
11 **recommendation?**

12 A. Mr. Gorman's recommendation is understated because he applies incorrect and
13 inconsistent approaches to reach his final ROE estimate. There are several specific
14 factors that detract from Mr. Gorman's analysis. In his multi-stage DCF analysis, the
15 result is low because Mr. Gorman applies a long-term GDP growth rate that is
16 understated. In his risk premium analysis, the result is also flawed because
17 Mr. Gorman rejects the well-documented, inverse relationship that exists between
18 equity risk premiums and the level of interest rates. Equity risk premiums increase
19 when interest rates are low and decrease when interest rates are higher. When
20 corrections are made to these areas of Mr. Gorman's analysis, his results support an
21 ROE in the range of 10 percent.

1 **Q. What are your principal areas of disagreement with Mr. Gorman?**

2 A. Mr. Gorman's analysis is negatively skewed by his assumptions and his application
3 of the models. While Mr. Gorman applies a non-constant growth DCF model similar
4 to mine and agrees that GDP growth is an acceptable input for that model, for his
5 long-term growth rate, he relies on relatively short-term GDP growth rate forecasts
6 that are dominated by recent historically low inflation. Mr. Gorman's GDP growth
7 forecast contains inflation estimates that are almost a full percentage point below
8 longer-term historical averages. This approach is inconsistent with the long-term
9 growth rate assumption required in the DCF model.

10 In his risk premium analysis, Mr. Gorman selects risk premiums that are not
11 consistent with recent risk premium data because he fails to include the well-
12 documented inverse relationship between risk premiums and interest rates, i.e., the
13 tendency for risk premiums to widen when interest rates are low and narrow when
14 interest rates are high. This omission causes Mr. Gorman's risk premium estimates to
15 be significantly understated.

16 **Q. Please elaborate on your specific disagreements with Mr. Gorman's multi-stage**
17 **DCF analyses.**

18 A. Mr. Gorman uses analysts' growth forecasts in the first five years of his multi-stage
19 analysis and then a GDP growth forecast for years 11 and later. In the intermediate
20 years, six through 10, he interpolates between the first and third stages.

21 Mr. Gorman's estimate of future GDP growth is far too low. His forecasts for five-
22 and 10-year periods are from the Blue Chip Financial Forecasts. The current Blue
23 Chip consensus is low because it is dominated by recent, virtually zero growth in the

1 economy, and it is based on assumed long-term inflation rates of only about 2.0
2 percent.

3 As shown in my updated GDP forecast,²⁰ these inflation rates are lower than
4 four out of six 10-year periods in the last 60 years. The nominal 4.9 percent growth
5 rate that Mr. Gorman uses is itself lower than nominal GDP growth in most of the 10-
6 year periods (other than the most recent periods, which include GDP growth rates of -
7 1.2 percent and 0.4 percent for 2008 and 2009, respectively). Mr. Gorman's use of
8 recently depressed, short-term data for his long-term DCF growth rate creates an
9 unrealistically low estimate of ROE.

10 **Q. In his DCF analysis, Mr. Gorman uses your comparable group, except he**
11 **removes Teco Energy because it is involved in an acquisition of New Mexico Gas**
12 **Company, which Teco announced on May 28, 2013. Do you agree that Teco**
13 **Energy should be removed from your comparable group?**

14 A. No. This acquisition does not have a material effect on the suitability of Teco Energy
15 for inclusion in my comparable group. In the acquisition announcement, Teco states
16 that New Mexico Gas will be acquired for an aggregate value of \$950 million,
17 including the assumption of \$200 million of debt. For the year ended January 31,
18 2013, New Mexico Gas had net income of \$23.2 million. By comparison, Teco
19 Energy had total assets of \$7.4 billion and total long-term debt of \$3.0 billion at year-
20 end 2012. For 2012, Teco Energy reported net income from continuing operations of
21 \$246 million. In this context, Teco Energy's financial situation is not materially
22 affected by this acquisition.

²⁰ Exhibit No.____(SCH-14).

1 **Q. Why do you disagree with Mr. Gorman's risk premium analysis?**

2 A. Mr. Gorman's risk premium analysis fails to include the well-documented tendency
3 for risk premiums to expand when interest rates are low. When his analysis is
4 modified to properly reflect wider risk premiums when interest rates are lower,
5 Mr. Gorman's risk premium analysis indicates a much higher ROE.

6 **Q. Why are Mr. Gorman's ROE results so low in his risk premium analysis?**

7 A. Mr. Gorman's risk premium data are presented in Exhibit No.__(MPG-14) and
8 Exhibit No.__(MPG-15). He discusses the analysis on pages 29-33 of his testimony.
9 The analysis consists of two parts. In one approach, Mr. Gorman adds government
10 bond equity risk premiums of 4.41 percent to 6.18 percent to a projected Treasury
11 bond yield of 3.70 percent. This produces an ROE result of 9.44 percent using a
12 25 percent weight for the lower end of the range and a 75 percent weight for the
13 upper end. In Mr. Gorman's second approach, he adds a utility bond risk premium of
14 3.03 percent to 4.88 percent to the recent "Baa" utility bond yield of 4.63 percent.
15 This produces an ROE result of 9.05 percent using the same 25 percent/75 percent
16 weighting scheme as discussed above. From these two results, Mr. Gorman
17 concludes that an ROE of 9.25 percent is appropriate (midpoint of 9.05 percent and
18 9.44 percent).

1 **Q. In the risk premium analysis described in your direct testimony,²¹ you used a**
2 **standard regression analysis to account for the inverse relationship between risk**
3 **premiums and interest rates. What do Mr. Gorman’s risk premium data**
4 **indicate when this approach is used?**

5 A. In Exhibit No.____(SCH-13), pages 2 and 4, I have applied the standard regression
6 analysis to calculate “interest rate adjustment” factors for Mr. Gorman’s two risk
7 premium studies. This approach properly takes into account the inverse relationship
8 between equity risk premiums and interest rates. With this adjustment, Mr. Gorman’s
9 Treasury bond risk premium analysis indicates an ROE of 10.07 percent, as shown in
10 pages 1 to 2 of Exhibit No.____(SCH-13). For his utility bond risk premium analysis,
11 the indicated ROE is 9.77 percent as shown on pages 3-4 of Exhibit No.____(SCH-13).
12 These results confirm that Mr. Gorman’s risk premium data support an ROE in the
13 range of 10.0 percent.

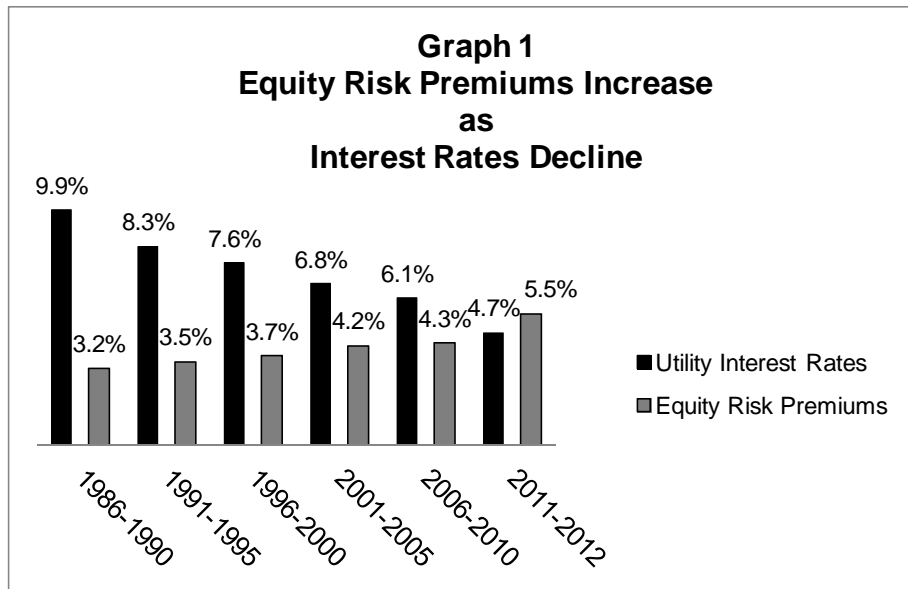
14 **Q. In your direct testimony, you showed that the inverse relationship between**
15 **equity risk premiums and interest rates can be seen without using a regression**
16 **analysis approach.²² Does that analysis apply to your rebuttal of Mr. Gorman’s**
17 **risk premium analysis as well?**

18 A. Yes. While statistical analysis is often used to substantiate certain economic and
19 financial relationships, for the equity risk premium issue the relationship is so basic
20 that simple observation of the data for various time periods makes the inverse
21 relationship clear. In Graph 1 below, average utility bond yields and average equity
22 risk premiums are presented for each non-overlapping five-year period between 1986

²¹ Exhibit No.____(SCH-1T) at pages 26-28.

²² Exhibit No.____(SCH-1T) at pages 27-28.

1 and 2010 and for 2011 through 2012 from the portion of my equity risk premium data
2 that Mr. Gorman used.



3 These data show that equity risk premiums have consistently increased as interest
4 rates have declined. This result is a simple reflection of the fact that required rates of
5 return in the stock market are not entirely dependent on changes in interest rates—
6 something that the Commission expressly acknowledged in Order 07 in PacifiCorp’s
7 2010 Washington Rate Case (Docket UE-100749).²³ Because utilities must compete
8 with other types of equity investments for capital, the ROE for utilities does not
9 change by as much as the observed changes in interest rates. For Mr. Gorman to use
10 the unadjusted simple average of long-term equity risk premiums with current interest
11 rates is simply wrong. Such an approach will consistently understate the required
12 ROE.

²³ *Wash. Utils. & Transp. Comm’n v. PacifiCorp d/b/a Pacific Power & Light Company*, Docket UE-100749, Order 07, ¶ 27, (May 12, 2011) (“We cannot limit our analysis of an appropriate cost of equity to a comparison of interest rates in different time periods. To effectively establish cost of equity, we must also consider the relationship between the risk a utility faces in financial markets and interest rates.”)

1 **Q. Mr. Gorman criticizes your GDP growth forecast because it is higher than his**
2 **Blue Chip forecast, which contains much lower projected inflation rates.²⁴ How**
3 **do you respond to Mr. Gorman's criticisms?**

4 A. As acknowledged by Mr. Gorman,²⁵ his Blue Chip forecasts are for only the next
5 five- and 10-year periods and those forecasts indicate inflation rates of only
6 2.1 percent and 2.2 percent, respectively. My GDP growth rate estimate is based on a
7 much longer time period, which is consistent with the DCF model's requirements,
8 and with what investors can reasonably expect once economic conditions become
9 more stable. While my forecast includes the near-term, low inflation rates that
10 dominate Mr. Gorman's five- and 10-year periods, I also include longer-term data
11 that cover other economic conditions, which can reasonably be expected to occur
12 over the very long-run DCF model horizon. Although I use data dating back to 1952
13 from the St. Louis Federal Reserve Bank database, my forecast is not a simple
14 average or extrapolation of the historical data. Like most econometric forecasts, my
15 approach uses the long-run historical relationships to project what investors may
16 reasonably expect for the long-run future.

17 However, to account for recent data having a greater influence on current
18 expectations, I applied a weighted averaging process that gives about five times as
19 much weight to the most recent 10 years as compared to the earliest 10 years. Giving
20 more weight to the more recent, low inflation years also lowers the overall forecast.
21 For example, my updated forecast is for a future growth rate of 5.6 percent, while the

²⁴ Exhibit No.__(MPG-1T) at page 45.

²⁵ *Id.* at lines 19-21.

1 overall long-run average of the data is a growth rate of 6.5 percent. In this context,
2 Mr. Gorman's criticism of my longer-term GDP growth forecast is unwarranted.

3 **Q. The Commission rejected your long-term GDP growth rate in PacifiCorp's 2010**
4 **rate case because the then-current economic conditions made long-term growth**
5 **rates unreliable. Please comment.**

6 A. As noted in the first section of my testimony, the economy has improved, more
7 normal economic conditions prevail, and the Fed has signaled the potential end to
8 monetary policies designed to artificially hold interest rates low. Given these
9 changes, a return to more traditional, long-term growth rates in the DCF model is
10 warranted.

11 **Q. Mr. Gorman criticizes your risk premium analysis because you used projected**
12 **rates in part of that analysis. How do you respond?**

13 A. Mr. Gorman's criticisms are misplaced. His risk premium analysis is very similar to
14 mine in the sense that we both rely on current and projected interest rates. We both
15 recognize that interest rates are forecast to increase in the coming years and that this
16 near unanimous viewpoint should be reflected in the ROE analysis in this case.

17 **UPDATE OF COE ESTIMATES**

18 **Q. Have you updated your COE analysis to take into account recent data and the**
19 **current conditions in the capital markets?**

20 A. Yes. Consistent with my customary practice, I have updated my COE analysis for
21 current conditions using the methodologies that I employed in my direct testimony.

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

2 A. My updated DCF results are shown in Exhibit No.__(SCH-15). The indicated DCF
3 range is 9.0 percent to 9.6 percent. As I note previously, these DCF results understate
4 PacifiCorp's COE because the dividend yields in these models have been artificially
5 depressed by the government's stimulative monetary policies. While the market's
6 reaction to a potential change in these policies is evident in my updated risk premium
7 analysis as explained below, these changes are not yet reflected in my DCF results.

8 **Q. What are the results of your updated bond yield plus equity risk premium
9 analysis?**

10 A. My equity risk premium studies are shown in Exhibit No.__(SCH-16). These
11 studies indicate an ROE range of 9.6 percent to 10.0 percent. In these studies, I have
12 added a third risk premium analysis, based on the spot interest rate data available in
13 mid-July, designed to capture the recent FOMC policy shift and the increasing
14 interest rate environment that the FOMC announcement has created.

15 **Q. What do you conclude from your updated COE analyses?**

16 A. My updated analysis shows that PacifiCorp's current COE remains approximately
17 10.0 percent. The lower updated DCF results, based on data from Value Line and
18 average stock prices for April through June 2013, cannot accurately reflect the FOMC
19 policy shift or the rising interest rates that have results. For this reason, I believe
20 more emphasis should be placed on the current risk premium results, based on more
21 recent interest rate data that do reflect the policy shift. As noted above, with interest
22 rates projected for 2014, the updated risk premium analysis indicates an ROE of 10.0
23 percent. These results show that the Company's requested 10.0 percent ROE is

1 reasonable and that Mr. Elgin's and Mr. Gorman's recommendations, as discussed
2 herein, are unreasonably low.

3 **Q. Given current economic developments, you suggest that the Commission place**
4 **more emphasis on your updated risk premium results than your updated DCF**
5 **results. Is this recommendation consistent with your understanding of the**
6 **Commission's approach to determining ROE?**

7 A. Yes. In Order 07 in Docket UE-100749, the Commission clarified that: "Each
8 method has both advantages and limitations, and can be relatively more useful
9 depending on the economic and capital market conditions at a specific time."²⁶

10 While the Commission typically relies on the DCF model to determine ROE, the
11 Commission has been clear that it will rely on other models if economic and capital
12 market conditions warrant. This is such a case.

13 **Q. Did you prepare an update to the CAPM analysis you provided in your direct**
14 **testimony?**

15 A. No. None of the cost of capital witnesses in this case relied upon CAPM estimates as
16 the basis for their ROE recommendations. There appears to be general consensus that
17 until Fed policies change and market-based interest rates once again prevail, CAPM
18 estimates of ROE will understate the market COE. For this reason, I did not include
19 CAPM estimates in my updated COE analysis.

20 **Q. Does this conclude your rebuttal testimony?**

21 A. Yes.

²⁶ *Wash. Utils. & Transp. Comm'n v. PacifiCorp d/b/a Pacific Power & Light Company*, Docket UE-100749, Order 07, ¶ 22 (May 12, 2011).