Application No. 18-04-002
Exhibit PAC/1500
Witness: Kurt G. Strunk

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

PACIFICORP

Rebuttal Testimony of Kurt G. Strunk

Return on Equity

November 2018

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ATTACHED EXHIBITS

Exhibit No. PAC/1501—Comparison of Cal Advocates ROE Recommendation to Industry Benchmarks

Exhibit No. PAC/1502—30-Year Treasury Yields 1990-Present

Exhibit No. PAC/1503—30-Year Treasury Yield Forecasts as of October 19, 2018

Exhibit No. PAC/1504—PacifiCorp California Summary of Cost of Equity Estimates

Exhibit No. PAC/1505—PacifiCorp California Overview of Companies Used in Proxy Group

Exhibit No. PAC/1506—PacifiCorp California Proxy Group Sustainable Growth

Exhibit No. PAC/1507—PacifiCorp California Proxy Group DCF Analysis

Exhibit No. PAC/1508—PacifiCorp California Yield + Growth Model

Exhibit No. PAC/1509—PacifiCorp California S&P 500 Forward Looking Market Risk Premium

Exhibit No. PAC/1510—PacifiCorp California Proxy Group Capital Asset Pricing Model (CAPM)

Exhibit No. PAC/1511—PacifiCorp California Bond Yield + Risk Premium

Exhibit No. PAC/1512—PacifiCorp California Comparable Earnings

Exhibit No. PAC/1513—PacifiCorp California Proxy Group Expected Earnings

Exhibit No. PAC/1514—PacifiCorp California Allowed ROE

1 **I. INTRODUCTION**

2 **Q. Please state your name, business address, and present position.**

3 A. My name is Kurt G. Strunk. I am a Director of National Economic Research
4 Associates (NERA). My business address is 1166 Avenue of the Americas, New
5 York, NY 10036. I am filing rebuttal testimony on behalf of PacifiCorp d/b/a Pacific
6 Power (PacifiCorp).

7 **Q. Have you already prepared direct testimony in this docket?**

8 A. Yes. My background and qualifications are described in my direct testimony as well
9 as in Exhibit No. PAC/201.

10 **II. PURPOSE OF TESTIMONY**

11 **Q. What is the purpose of your testimony?**

12 A. The purpose of my testimony is to present my analysis and conclusions as to the
13 reasonableness of the cost of capital evidence offered by Mr. Yakov Lasko on
14 behalf of the Public Advocates Office at the California Public Utilities
15 Commission (Cal Advocates).

16 **Q. Please identify the specific contentions of Mr. Lasko that you address.**

17 A. I address the following aspects of his testimony, including:

18 1) The overall magnitude of Mr. Lasko's return on equity (ROE)
19 recommendation, which is significantly lower than any objective measure
20 of fair return for PacifiCorp; and

21 2) Mr. Lasko's assertions that Community Choice Aggregation (CCA) does not
22 affect PacifiCorp's current cost of equity.

23 I also outline for the Commission several important factors affecting the fair return

1 for PacifiCorp that Mr. Lasko fails to consider or address, including:
2 3) The failure of Mr. Lasko to consider other risks specific to PacifiCorp and
3 electric utilities operating in California;
4 4) The failure of Mr. Lasko to address rising interest rates and their effect on
5 PacifiCorp's cost of capital during the rate effective period; and,
6 5) The failure of Mr. Lasko to address the effects of anomalous capital market
7 conditions on the cost of equity modelling.
8 **Q. Please summarize your conclusions.**
9 A. My review of Mr. Lasko's testimony leads me to conclude that Mr. Lasko's
10 recommended ROE of 8.94 percent falls outside of the zone of reasonableness and
11 understates the fair return for PacifiCorp.
12 • *Prima facie* indicators confirm that Mr. Lasko's recommended ROE is
13 unreasonable and not an accurate indicator of fair return:
14 ▪ No state regulator has authorized a return for an investor-owned
15 electric utility as low as 8.94 percent in either 2017 or 2018;
16 ▪ The 8.94 percent Cal Advocates ROE recommendation falls over 130
17 basis points below the current ROE authorizations for the three largest
18 California electric investor-owned utilities.
19 • Mr. Lasko gives inappropriate weight to the unadjusted DCF model, which
20 regulatory agencies have found to produce ROEs that are unreasonably low in
21 current market conditions.
22 • Mr. Lasko focuses exclusively on a proxy group rate of return estimate and
23 ignores risk differences as between PacifiCorp and the proxy group

1 companies. As such,

2 - Mr. Lasko dismisses the CCA risks faced by the company on the
3 grounds that those risks have not yet materialized, in patent
4 contradiction to the well-established financial tenet that investors
5 today price in all risks, present and future. Although the risk of CCA
6 can take time to materialize, investors price it today when analyzing
7 long-term equity investments in California's electric utilities.
8 - Mr. Lasko ignores the risks of PacifiCorp in California relative to the
9 proxy group companies. The company faces major challenges
10 associated with converting the company's generation fleet to greener
11 fuels, and billions of dollars of investment will be required to do so.
12 As I explain in my direct testimony, affording the company a return
13 that reflects the higher risk faced by PacifiCorp's California operations
14 will assure that the company maintains credit quality throughout this
15 period of large capital expenditures.

16 - Mr. Lasko's testimony is silent on the effect of rising interest rates on the
17 allowed return. As the Federal Reserve normalizes interest rates and unwinds
18 the large securities positions it has accumulated on its balance sheet, interest
19 rates will rise. Unlike the large investor-owned electric utilities in California,
20 PacifiCorp does not have a mechanism to pass through increases in its cost of
21 capital between rate cases. In such a context, it is appropriate to consider the
22 rising interest rate environment when determining where within the zone of
23 reasonableness to place PacifiCorp's ROE.

1 • Mr. Lasko does not account for the fact that equity markets are exhibiting
2 periods of heightened volatility. Volatility tends to drive up the cost of capital
3 and needs to be considered when evaluating a fair return on equity.

4 Because of the flaws in the Cal Advocates' analysis identified above, it cannot be
5 relied upon to establish a fair return for PacifiCorp.

6 **Q. How is the remainder of your testimony organized?**

7 A. Section III discusses the overall level of the ROE recommendation advanced by
8 Mr. Lasko. Section IV addresses the effect of rising interest rates on PacifiCorp's
9 cost of capital. Section V provides an update to current capital market conditions and
10 explains why the anomalous conditions must be taken into consideration in the
11 development of a fair return. Section VI explains the risks specific to PacifiCorp in
12 California and the company's need to assure credit quality throughout a period of
13 large capital expenditures. Section VII responds to the Cal Advocates' testimony
14 regarding the risks of CCA in California. Section VIII provides an update to my
15 original cost-of-capital analysis using the most recent information from capital
16 markets.

17 **III. MAGNITUDE OF FAIR RETURN RECOMMENDATIONS**

18 **Q. Please recap the basis for your 10.60 percent recommendation in your direct**
19 **testimony.**

20 A. The evidence that I present in my direct testimony shows model estimates and
21 comparable return benchmarks ranging from 8.37 to 12.10 percent for the proxy
22 group and electric utility industry, a comparable return benchmark of 10.07 percent
23 for electric transmission firms, a comparable return benchmark of 14.09 percent for

1 natural gas pipeline firms and a comparable return benchmark of 16.50 percent for
2 unregulated industrial firms. As I noted in my direct testimony, anomalous
3 conditions in the capital markets can distort the model results and can lead to model
4 estimates that fall outside of the zone of reasonableness. I therefore give less weight
5 to those models whose results diverge manifestly from the observed ROEs available
6 to investors in comparable utilities. I also recognize that equity investors are
7 witnessing turbulent markets and confronting new risks arising from the extended
8 duration and sheer magnitude of unprecedented central bank policy interventions, and
9 the Federal Reserve's process of normalizing interest rates and reducing the size of its
10 balance sheet securities holdings.

11 I base my 10.60 percent base return recommendation on the model results and
12 return benchmarks that are sensibly consistent with actual returns achieved and
13 expected to be earned by comparable utilities, while also recognizing the specific
14 risks facing the company and other California investor-owned utilities. Relying on
15 returns that fall significantly below the objective benchmark return levels, as
16 Mr. Lasko does, necessarily places the recommendation outside of the zone of
17 reasonableness. It is also unreasonable that Mr. Lasko does not undertake any
18 relative risk assessments as between PacifiCorp's California operations and those of
19 the proxy group companies. The unique risks of PacifiCorp's California operations—
20 risks associated with CCA and wildfire-related cost recovery—must be reflected in
21 the fair return.

22 **Q. You prepared Exhibit No. PAC/1501. Please describe that exhibit.**

23 A. Exhibit No. PAC/1501 compares the 8.94 percent ROE recommendation made by

1 Mr. Lasko to the returns that have been authorized by other state regulatory
2 commissions for vertically-integrated utilities during the last two years—*i.e.*, since
3 November 2016. Exhibit No. PAC/1501 illustrates that the Cal Advocates'
4 recommendation falls below the low end of the range of returns available to similarly-
5 situated, vertically-integrated utilities. No state regulatory authority has granted an
6 ROE that low in the current conditions.

7 While my recommendation falls above the average allowed return, it does fall
8 reasonably within the range of observed allowed returns and is appropriately above
9 the average in light of the unique risks facing PacifiCorp's California operations, as
10 outlined elsewhere in this rebuttal testimony.

11 **Q. What does Exhibit No. PAC/1501 indicate regarding the return recommendation**
12 **of Mr. Lasko?**

13 A. It confirms that the ROE recommendation of 8.94 percent from Mr. Lasko falls
14 outside and well below the zone of reasonableness, which requires that the fair return
15 reflect returns available to investors in investments of comparable risk. The ROE
16 recommended by the Cal Advocates' witness is not sufficiently compensatory to
17 provide the level of return available to other electric utility investments and does not
18 reflect risk differences for PacifiCorp in California.

19 **IV. RISING INTEREST RATES**

20 **Q. Please describe the current interest rate environment.**

21 A. The interest rate environment is in flux. The Federal Reserve's initial implementation
22 of its plan to normalize interest rates has led to increases in several key benchmark
23 rates. (*see* Exhibit No. PAC/1502). Wall Street analysts expect long-term treasury

1 rates to rise by over 40 basis points in the coming eight quarters. (*see* Exhibit No.
2 PAC/1503).

3 **Q. How does this environment of rising interest rates affect PacifiCorp's cost of**
4 **capital during the rate effective period?**

5 A. Over the course of the rate effective period, it is reasonable to expect that as
6 PacifiCorp taps the capital markets to fund its infrastructure programs, it will face
7 higher costs of capital. If the return allowed to PacifiCorp in the instant proceeding is
8 only sufficient to cover today's costs of capital, it will not recover the expected future
9 increases.

10 **Q. Does the Cal Advocates' testimony explicitly or implicitly recognize the effect of**
11 **rising interest rates on PacifiCorp's return on equity?**

12 A. No, the Cal Advocates' testimony does not take into account the rising interest rates
13 during the rate effective period when making an ROE recommendation. As such, the
14 Cal Advocates' recommended rate of return is far lower than reasonable to reflect
15 upcoming changes in the interest rates faced by the company.

16 V. CURRENT CAPITAL MARKET CONDITIONS

17 **Q. How have capital market conditions evolved since you prepared your direct**
18 **testimony?**

19 A. As noted, interest rates are on the rise. Yields for investment-grade utility and
20 corporate bonds have risen by approximately 40 to 100 basis points since I prepared
21 my direct testimony. The equity market continues, at times, to exhibit wide swings in
22 value. While the Federal Reserve is intent on normalizing interest rates and
23 unwinding balance sheet positions, the overall global capital markets still incorporate

1 the effects of the unprecedented accommodative policies implemented by global
2 central banks.

3 **Q. How do these anomalous conditions affect your modeling results?**

4 A. As noted in my direct testimony, as this recent course of extraordinary monetary
5 policy has pushed equity valuations higher, DCF results have often been inconsistent
6 with other indicators of required returns on equity. One must view the DCF results
7 cautiously in this context. I compare them to other ROE metrics before assigning
8 weight to them.

9 **Q. Does the Cal Advocates testimony explicitly or implicitly recognize the unusual**
10 **nature of capital market conditions?**

11 A. No, the Cal Advocates' testimony does not recognize the unusual nature of capital
12 market conditions and consequently does not consider how the current conditions
13 may be distorting the model results when making an ROE recommendation. By
14 giving too much weight to the DCF model, Mr. Lasko recommends a rate of return
15 far below that indicated by other benchmarks.

16 **Q. Do you view it as problematic that the Cal Advocates testimony only considers**
17 **three return benchmarks (DCF, CAPM, Risk Premium)?**

18 A. Yes. In today's market conditions, I do consider the limited focus of the Cal
19 Advocates to three benchmarks to be problematic. Due to the potential for distortion
20 in any model in the current environment, it is important also to consider other
21 benchmarks. In my direct testimony, I present evidence on the allowed returns to
22 other regulated utilities, on the expected earnings of the proxy group companies, and
23 on the historical returns of industrial companies. These additional benchmarks allow

1 me to place my recommended ROE in the broader context of returns available to
2 investors in a range of relevant asset classes. Mr. Lasko's focus is too limited.

3 **VI. COMPANY-SPECIFIC RISKS TO PACIFICORP**

4 **Q. Please summarize the company-specific risks PacifiCorp faces.**

5 A. PacifiCorp's shifting fuel mix from coal to renewables and the accompanying
6 upsizing of capital expenditures create uncertainty and risk for the company.
7 Furthermore, gains in energy efficiency and growth in the number of net metering
8 customers has led to flatter load growth in PacifiCorp's service territories. Since
9 PacifiCorp recovers much of its fixed costs through variable (i.e., per kWh)
10 charges, the uncertainty regarding future load levels and cost recovery poses
11 significant financial risk. PacifiCorp is also in a position of higher risk relative to
12 comparable utilities in California—as opposed to the largest California IOUs,
13 PacifiCorp cannot adjust its authorized cost of capital in between rate cases,
14 leading to a higher risk. In addition, all of the investor-owned utilities in
15 California face heightened risks due to wildfires.

16 **Q. How does the investment community view the risk of wildfires and the**
17 **potential for insufficient cost recovery?**

18 A. Rating agencies are most concerned about inverse condemnation and view
19 considerable risks to the California utilities if the policy is not changed. Moody's,
20 for example, notes:

> 21 Wildfire events have become a significant concern for all of California's
> 22 utilities, regardless of whether they are investor or publicly owned.
>
> 23 For years, the California legal system has applied a legal theory of inverse
> 24 condemnation to wildfire cases. This exposes a utility to liabilities if their
> 25 equipment is determined to be the source of the fire, regardless of fault. This

> application of strict liability subjects Californian electric utilities to material contingent liabilities related to wildfires, a unique risk factor across the sector.
>
> The rising risk associated with the wildfires and other severe weather events has translated into higher regulatory risk for investor-owned utilities in California due to inverse condemnation exposure and the uncertainty that they will be able to recover related costs from ratepayers.
>
> However, [SB 901] failed to address the strictly liability standard created by the application of inverse condemnation legal theory and leaves a considerable amount of uncertainty regarding cost recovery stemming from exposure created by inverse condemnation.[1]

In a report on PG&E's credit, Moody's goes on to say:

> Wildfires have become more frequent and damaging due to the effects of climate change, including more severe and prolonged droughts and stronger winds. In addition, California has witnessed a proliferation of real estate developments in fire-prone areas. These changes have resulted in higher wildfire related risks while the insurance market has become tighter and more expensive making it more challenging for utilities obtain coverage. As a result, despite their increased efforts to mitigate fire risks, <u>California utilities' exposure to wildfires could be significant, totaling multiple billions of dollars</u>.[2] (emphasis added)

Q. Have these concerns also affected equity valuations?

A. Yes. For example, the shares of Pacific Gas & Electric Company parent PG&E Corp. have suffered as a result of the wildfire exposure. As noted by Bloomberg, Morgan Stanley recently lowered its target price:

> As mounting concern about PG&E Corp.'s wildfire liabilities drove its shares lower for a sixth straight day, Morgan Stanley analysts backed off of their bullish recommendation and cut their price target by more than half, citing an "unprecedented level of uncertainty." The stock fell as much as 30 percent Thursday, pushing the six-day drop to more than 63 percent. California's biggest utility owner has been roiled as wildfires continue to ravage the state. Morgan Stanley analysts led by Stephen Byrd cut their rating on PG&E to the equivalent of hold from buy and lowered the price target to $31 from $67.

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[1] *See*, Moody's Rating Action, "Moody's downgrades Southern California Edison to A3 from A2 and Edison International to Baa1 from A3; outlooks stable," dated September 6, 2018.

[2] *See* Moody's, "PG&E Corporation Update following rating downgrade and negative outlook," dated September 7, 2018.

> They had been bullish on the stock since early 2016, according to data compiled by Bloomberg.[3]

The large drop in valuation for PG&E—more than 50 percent to date during November 2018—underscores the importance investors place on these risks. Reductions in equity value, such as those that occurred for PG&E and also for the parent companies of Southern California Edison and San Diego Gas & Electric, translate to an increase in the required return on equity, all else equal.

Q. Are the utilities prohibited from recovering certain wildfire-related costs?

A. Yes. Under SB 901, certain compliance-related costs cannot be recovered from ratepayers, whether prudent or not.

Q. How do these specific risks to PacifiCorp affect your recommended return on equity?

A. These risks lead me to choose a recommended ROE that is above the average observed benchmark ROE estimates.

Q. Does the Cal Advocates' testimony explicitly or implicitly recognize the several company-specific risks that PacifiCorp faces?

A. No, the Cal Advocates' testimony does not recognize the company-specific risks PacifiCorp faces and consequently does not consider these risks when making an ROE recommendation. As such, the Cal Advocates' recommended rate of return is far lower than what PacifiCorp's unique circumstances indicate to be the fair rate of return.

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[3] Bloomberg Markets: "Market Punishes PG&E on Speculation About Downgrade and Default," November 15, 2018.

1 **VII. RISKS SURROUNDING CCA**

2 **Q. Please explain the position of the Cal Advocates witness with respect to CCA**
3 **and customer choice.**

4 A. The Cal Advocates witness does not think the potential of CCA should result in
5 increased risk for PacifiCorp above its model ROE results. The Cal Advocates
6 witness alleges that it is speculative whether a CCA will be established in
7 PacifiCorp's service territory and thus does not think that departing loads to CCA
8 will affect the number of PacifiCorp customer accounts in California in the near
9 future. Furthermore, the Cal Advocates witness believes that even if a CCA were
10 to form in PacifiCorp's service territory it would not pose increased risk for
11 PacifiCorp in this rate case because the witness alleges that it takes at least two
12 years for a CCA to be established.

13 **Q. Please respond to Mr. Lasko's assertion that it is only speculative whether a**
14 **CCA will be established in PacifiCorp's service territory.**

15 A. Mr. Lasko appears not to have considered the ease with which a community seeking
16 to take advantage of CCA could readily join with an existing CCA as several
17 communities have done, thereby obviating the need for significant investment or lead
18 time. Even if Mr. Lasko were correct regarding the necessary lead time, the risk of
19 CCAs is not speculative as communities directly adjacent to PacifiCorp's service
20 territory have implemented a CCA and others are examining the possibility.

1 **Q. Do you agree with Mr. Lasko's argument that if it is only speculative whether a**
2 **CCA will be established in PacifiCorp's service territory then it follows that**
3 **risks stemming from CCA should not be incorporated into PacifiCorp's cost of**
4 **capital?**
5 A. No, I do not agree with this argument. This argument reveals a misunderstanding of
6 how risk and uncertainty affect the cost of capital. The cost of capital is, by nature, a
7 forward-looking measure. No one can know the future with certainty, but utility
8 investors assess the risks of unknowns and account for those risks in the prices at
9 which they are willing to trade utility shares. If a risk is far off in the future, then
10 investors will discount it appropriately. Similarly, as risks become closer to
11 realization, they are given greater weight by investors.
12 **Q. Can you give an example of how investors price in risk *before* a negative event**
13 **actually occurs?**
14 A. Yes. Take, for example, the electricity sector restructuring process in Illinois. In
15 2005, Ameren faced large risks of non-recovery of sector restructuring transition-
16 related costs. At the time Moody's wrote, "Moody's believes that regulatory risk
17 remains high with regard to the prospects for full and timely recovery of costs
18 incurred by Ameren's Illinois utilities post-2006."[4] As a result, Moody's downgraded
19 $2.2 billion worth of Ameren debt from A3 to Baa1.[5] Mr. Lasko's notion that risks
20 need to be realized or imminent before they are reflected in the cost of capital is

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[4] "Approximately $2.2 Billion of Debt Securities Downgraded," *Moody's Investors Service: Global Credit Research,* Dec 2005.
[5] Note that in this example, Illinois only represented half of Ameren's business. Had Illinois been 100 percent of Ameren's business, the rating downgrade presumably would have been more severe.

1 inaccurate.

2 **Q. Please respond to Mr. Lasko's assertion it takes at least two years from the**
3 **earliest stages of exploration of a CCA to reach an official launch.**

4 A. In his testimony, Mr. Lasko seems to base this two-year time period off of one
5 example alone—Sonoma Clean Power. Mr. Lasko provides no evidence that CCAs
6 as a whole require a development period of at least two years. As noted, a
7 community could easily leverage the experience and capabilities of other existing
8 CCAs by simply having their community join an existing CCA. This has been
9 accomplished multiple times in California already, and does not require the new
10 community to undertake the development and investment resources that were
11 required for the original CCA.

12 **Q. Even if it were to take at least two years for a new CCA to fully develop, do you**
13 **agree that the length of that development period precludes risks associated with**
14 **CCA from being relevant to this rate case?**

15 A. No. The period during which rates established in this proceeding will remain
16 effective is uncertain.[6] It is certainly plausible that new CCAs will be implemented
17 during this rate effective period. But that is not the point. Whether they are
18 implemented is less important than the risks perceived by investors surrounding their
19 implementation. The evidence is clear that investors today are concerned about
20 CCAs in California and that they view it as a risk factor.[7] While the Commission has

[6] Commission rules require PacifiCorp to file a general rate case every three years. This requirement, however, can be waivered and, in the case of PacifiCorp, was waived several times during the period between PacifiCorp's last general rate case and the filing of this general rate case.

[7] *See* Moody's, "PG&E Corporation, Update following rating downgrade and negative outlook" dated September 7, 2018.

1 sought to address stranded costs and implement mechanisms for their recovery,[8] risks
2 to the utilities remain.

3 **Q. Please summarize why the risks associated with CCA merit placement of the**
4 **allowed ROE above the middle of the zone of reasonableness.**

5 A. In the past, regulatory action to allow retail customers to cease to receive generation
6 service provided by the incumbent utility has led to major disruptions and
7 transformations for the industry. These changes sparked great uncertainty during the
8 transition to the new model. Incumbent utilities experienced credit rating
9 downgrades, and significant equity price volatility, resulting from the realization of
10 risks associated with the new industry structure. The heightened risks faced by
11 utilities undergoing these types of transitions must be accounted for when making an
12 ROE recommendation and should, as a result, lead to higher costs of capital for the
13 incumbent utilities.

14 **VIII. UPDATE TO COST-OF-CAPITAL ANALYSIS**

15 **Q. Have you updated your cost-of-capital analysis to incorporate the most recent**
16 **information from capital markets?**

17 A. Yes, I have. Exhibit Nos. PAC/1504 through PAC/1514 contain the updated analysis.

18 **Q. Were there any noteworthy changes to the inputs of your cost-of-capital**
19 **analysis?**

20 A. The only noteworthy changes to the inputs involve which companies comprise
21 PacifiCorp's proxy group in the model.

[8] *See* Commission, Decision 18-10-019, dated October 11, 2018.

1 **Q. Please summarize the changes made to the proxy group for the updated cost-of-**
2 **capital analysis.**
3 A. In the update, Avangrid, Inc., Avista Corporation, PPL Corporation, and WEC
4 Energy Group were added to the proxy group, while Great Plains Energy
5 Incorporated, Southern Company, Vectren Corporation, and Westar Energy, Inc. were
6 excluded from the proxy group.
7 **Q. In the updated cost-of-capital analysis, what is the full set of comparable**
8 **companies included in the proxy group?**
9 A. As shown in Exhibit No. PAC/1505, my updated electric proxy group includes 25
10 companies: (1) ALLETE, Inc.; (2) Alliant Energy Corporation; (3) Ameren
11 Corporation; (4) American Electric Power Company, Inc.; (5) Avangrid, Inc.; (6)
12 Avista Corporation; (7) CMS Energy Corporation; (8) Consolidated Edison, Inc.; (9)
13 DTE Energy Company; (10) Duke Energy Corporation; (11) Edison International;
14 (12) El Paso Electric Company; (13) Eversource Energy; (14) Fortis Inc.; (15)
15 IDACORP, Inc.; (16) NextEra Energy, Inc.; (17) OGE Energy Corp.; (18) PG&E
16 Corporation; (19) Pinnacle West Capital Corporation; (20) PNM Resources, Inc.; (21)
17 Portland General Electric Company; (22) PPL Corporation; (23) Public Service
18 Enterprise Group Incorporated; (24) WEC Energy Group, Inc.; and (25) Xcel Energy
19 Inc.
20 **Q. How did you arrive at this proxy group?**
21 A. I used the same series of screening criteria that I used in my direct testimony to
22 identify firms that have similar characteristics to PacifiCorp.

1 **Q. Please describe how the screening criteria were applied.**

2 A. I started with the 40 companies classified by Value Line as being in the electric utility
3 industry. The application of the credit rating screen reduced the proxy group to 33
4 companies. One additional company lacked a five-year positive growth forecast,
5 reducing the proxy group to 32 companies. The merger and extraordinary event
6 screen identified seven additional companies for exclusion:

7 - Dominion Energy, Inc. (1), which plans to acquire SCANA
8 Corporation for $14.2 billion.
9 - Black Hills Corporation (2), which plans to acquire Colorado
10 Electric Utility Co for $1.1 billion.
11 - Sempra Energy (3), which has acquired Energy Future Holdings
12 Corp for $13.1 billion.
13 - Southern Company (4), which plans to sell $6.5 billion in assets to
14 NextEra Energy, Inc.
15 - CenterPoint Energy, Inc. (5), which plans to acquire Vectren Corp.
16 for $8.1 billion.
17 - Vectren Corp. (6), for the same reason as above.
18 - Evergy, Inc. (7), which has acquired Great Plains Energy for $15
19 billion.

20 The elimination of the seven merger-affected companies reduces the proxy group to
21 25 companies. All remaining companies had data available to run the DCF model,
22 and hence were adopted as the proxy group. This screening selection is shown in

1 Exhibit No. PAC/1505. As noted in this exhibit, the results of screens were only
2 reported if a prospective proxy company passed all prior screens.
3 **Q. Do the results from your update change your conclusions with respect to the fair**
4 **return for PacifiCorp?**
5 A. No, they do not. The ROE model results have in some cases increased and in others
6 decreased. On balance, they continue to reflect a range of estimates with most values
7 in the range of 9.7 percent to 10.5 percent. Taken in context with the risks described
8 in my direct and rebuttal testimonies, these results continue to confirm that 10.6
9 percent is a fair ROE for PacifiCorp.
10 **Q. Does this conclude your rebuttal testimony?**
11 A. Yes.