

Application No. 18-04-____
Exhibit PAC/300
Witness: Nikki L. Kobliha

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

PACIFICORP

Direct Testimony of Nikki L. Kobliha

Capital Structure
Cost of Debt and Preferred

April 2018

TABLE OF CONTENTS

I.	QUALIFICATIONS	1
II.	PURPOSE OF TESTIMONY	1
III.	FINANCING OVERVIEW	3
	Credit Ratings	5
	Rating Agency Debt Imputations.....	14
	Financing Cost Calculations	16
	Embedded Cost of Long-Term Debt.....	18
	Embedded Cost of Preferred Stock.....	18

ATTACHED EXHIBITS

Exhibit PAC/301 – Cost of Long-Term Debt

Exhibit PAC/302 – Arizona Public Service Company Access to Commercial Paper Market

Exhibit PAC/303 – Post Acquisition Cost of Long-Term Debt

Exhibit PAC/304 – Standard & Poor’s Ratings Direct—Key Credit Factors

Exhibit PAC/305 – Variable Rate PCRB

Exhibit PAC/306 – Cost of Preferred Stock

1 **Q. Please state your name, business address, and present position with PacifiCorp**
2 **d/b/a Pacific Power (PacifiCorp).**

3 A. My name is Nikki L. Kobliha. My business address is 825 NE Multnomah Street,
4 Suite 1900, Portland, Oregon 97232. My present position is Vice President, Chief
5 Financial Officer and Treasurer.

6 **I. QUALIFICATIONS**

7 **Q. Briefly describe your education and business experience.**

8 A. I received a Bachelor of Business Administration with a concentration in Accounting
9 from the University of Portland in 1994. I became a Certified Public Accountant in
10 1996. I joined PacifiCorp in 1997 and have taken on roles of increasing
11 responsibility before being appointed Chief Financial Officer in 2015.

12 **Q. Please describe your present duties.**

13 A. I am responsible for PacifiCorp's finance, accounting, income tax, internal audit,
14 Securities and Exchange Commission reporting, treasury, credit risk management,
15 pension, and other investment management activities. I am also responsible for the
16 preparation of PacifiCorp's embedded cost of debt and preferred equity and any
17 associated testimony related to capital structure for regulatory filings in all of
18 PacifiCorp's state and federal jurisdictions.

19 **II. PURPOSE OF TESTIMONY**

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

21 A. The purpose of my testimony is to support PacifiCorp's capital structure including the
22 costs of capital and the common equity level of 51.96 percent. My testimony
23 provides evidence of why that level is appropriate and a benefit to customers,

1 including maintaining PacifiCorp’s current credit ratings, which provides for a more
 2 competitive cost of debt and overall cost of capital, and facilitates continued access
 3 by the company to the capital markets over the long-term. This capital structure is
 4 necessary to enable PacifiCorp to continue to invest in infrastructure in order to
 5 provide safe and reliable service from clean energy resources to our customers at
 6 reasonable costs.

7 **Q. What time period do your analyses cover?**

8 A. The test period in this proceeding is the 12 months ending December 31, 2019 (Test
 9 Period). To appropriately match PacifiCorp’s costs with customer prices during the
 10 Test Period, I determined the capital structure and costs of long-term debt and
 11 preferred stock using an average of the five quarter-ending balances spanning the Test
 12 Period.

13 **Q. What is the overall cost of capital that you are proposing in this proceeding?**

14 A. PacifiCorp is proposing an overall cost of capital of 7.94 percent. This cost includes
 15 the return on equity recommendation of 10.60 percent from Mr. Kurt G. Strunk’s
 16 testimony in this case (Exhibit PAC/200) and the following capital structure and costs
 17 set forth in Table 1.

Table 1: Overall Cost of Capital

Component	\$m	% of Total	Cost %	Weighted Average Cost %
Long-Term Debt	\$7,545	48.02%	5.05%	2.43%
Preferred Stock	\$2	0.02%	6.75%	-
Common Stock Equity	\$8,164	51.96%	10.60%	5.51%
	\$15,711	100.00%		7.94%

1 equity component of the capital structure to increase. This provides more flexibility
2 regarding the type and timing of debt financing, better access to the capital markets, a
3 more competitive cost of debt, and over the long-run, more stable credit ratings; all of
4 which assist in financing such expenditures. In addition, all else being equal,
5 PacifiCorp will need to have a greater common equity component to offset various
6 adjustments that rating agencies make to the debt component of the company's
7 published financial statements. I discuss these adjustments in greater detail later in
8 this testimony.

9 **Q. Does PacifiCorp pay dividends to its parent, Berkshire Hathaway Energy**
10 **Company (BHE)?**

11 A. Yes. Absent the payment of dividends, retention of earnings would cause the
12 percentage of common equity to grow beyond the level necessary to support the
13 current credit ratings. Accordingly, dividend payments are necessary, in combination
14 with debt issuances, to keep the percentage of equity in PacifiCorp's capital structure
15 in line with the level sufficient to support the company's credit ratings. As a result,
16 PacifiCorp pays dividends to BHE to manage the common equity component of the
17 capital structure and keep the company's overall cost of capital at a prudent level.

18 **Q. What type of debt does PacifiCorp employ in meeting its financing**
19 **requirements?**

20 A. PacifiCorp has completed the majority of its long-term financing using secured first
21 mortgage bonds issued under the Mortgage Indenture dated January 9, 1989. Exhibit
22 PAC/301, Cost of Long-Term Debt, shows that, over the Test Period, PacifiCorp is
23 projected to have an average of approximately \$7.3 billion of first mortgage bonds

1 outstanding, with an average cost of 5.1 percent. Presently, all outstanding first
2 mortgage bonds bear interest at fixed rates. Proceeds from the issuance of the first
3 mortgage bonds (and other financing instruments) are used to finance the utility
4 operation.

5 Another important source of financing has been the tax-exempt financing
6 associated with certain qualifying equipment at power generation plants. Under
7 arrangements with local counties and other tax-exempt entities, these entities issue
8 securities, PacifiCorp borrows the proceeds of these issuances and pledges its credit
9 quality to repay the debt in order to take advantage of the tax-exempt status of the
10 financing. During the 12 months ending December 31, 2019, PacifiCorp's tax-
11 exempt portfolio is projected to be \$256 million in principal with an average cost of
12 2.9 percent, including the cost of issuance and credit enhancement.

13 **Credit Ratings**

14 **Q. What are PacifiCorp's current credit ratings?**

15 A. PacifiCorp's current ratings are shown in Table 2.

Table 2: PacifiCorp Credit Ratings

	Fitch	Moody's	Standard & Poor's
Senior Secured Debt	A+	A1	A+
Senior Unsecured Debt	A	A3	A
Outlook	Stable	Stable	Stable

16 **Q. How does the maintenance of PacifiCorp's current credit rating benefit**
17 **customers?**

18 A. First, the credit rating of a utility has a direct impact on the price that a utility pays to

1 attract the capital necessary to support its current and future operating needs. Many
2 institutional investors have fiduciary responsibilities to their clients, and are typically
3 not permitted to purchase non-investment grade (i.e. rated below BBB-) securities or
4 in some cases even securities rated below a single A. A solid credit rating directly
5 benefits customers by reducing the immediate and future borrowing costs related to
6 the financing needed to support regulatory obligations.

7 Second, credit ratings are an estimate of the probability of default by the
8 issuer on each rated security. Lower ratings equate to higher risks and higher costs of
9 debt. The financial crisis of 2008 and 2009 provides a clear and compelling example
10 of the benefits of the company's credit rating because PacifiCorp was able to issue
11 new long-term debt during the midst of the financial turmoil. Other lower-rated
12 utilities were shut out of the market and could not obtain new capital.

13 Further, PacifiCorp has a near constant need for short-term liquidity as well as
14 periodic long-term debt issuances. PacifiCorp pays significant amounts daily to
15 suppliers whom we count on to provide necessary goods and services such as fuel,
16 energy, and inventory. Being unable to access funds can risk the successful
17 completion of necessary capital infrastructure projects and would increase the chance
18 of outages and service failures over the long-term.

19 PacifiCorp's creditworthiness, as reflected in its credit ratings, will strongly
20 influence its ability to attract capital in the competitive markets and the resulting costs
21 of that capital.

1 **Q. Please provide examples where poor credit ratings hurt a utility's flexibility in**
2 **the credit markets.**

3 A. During the financial turmoil of 2008, Arizona Public Service Company (rated
4 Baa2/BBB- at that time) filed a letter with the Arizona Corporation Commission in
5 October 2008 stating that the commercial paper market was completely closed to it
6 and it likely could not successfully issue long-term debt.²

7 Further, those issuers who could access the markets paid rates well above the
8 levels that PacifiCorp was able to achieve. For example, PacifiCorp issued new 10-
9 and 30-year long-term debt in January 2009 with 5.50 percent and 6.00 percent
10 coupon rates, respectively. Nevada Power (rated Baa3/BBB at that time) issued new
11 debt two days following PacifiCorp's January 2009 issuance and was required by
12 investors to pay a coupon of 7.37 percent for a five-year maturity. Subsequently,
13 Puget Sound Energy (rated Baa2/A- at that time) issued new seven-year debt at a
14 credit spread over Treasuries of 480.3 basis points resulting in a 6.75 percent coupon.

15 **Q. Can regulatory actions or orders affect PacifiCorp's credit rating?**

16 A. Yes. Regulated utilities such as PacifiCorp are fairly unique since they cannot
17 unilaterally set the price for services. The financial integrity of a regulated utility is
18 largely a result of the prudence of utility operations and the corresponding prices set
19 by regulators. Rates are established by regulators to permit the utility to recover
20 prudently incurred operating expenses and a reasonable opportunity to earn a fair
21 return on the capital invested.

22 Rating agencies and investors have a keen understanding of the importance of

² Exhibit PAC/302.

1 regulatory outcomes. For example, Standard & Poor's (S&P) has opined on the
2 correlation between regulatory outcomes and credit ratings, concluding:

3 Although not common, rate case outcomes can sometimes lead
4 directly to a change in our opinion of creditworthiness. Often it's a
5 case that takes on greater importance because of the issues being
6 litigated. For example, in 2010, we downgraded Florida Power &
7 Light and its affiliates following a Florida Public Service
8 Commission rate ruling that attracted attention due to drastic
9 changes to settled practices on rate case particulars like depreciation
10 rates. More recently, in June 2016, we downgraded Central Hudson
11 Electric & Gas due to our revised opinion of regulatory risk. While
12 that reflected the company's own management of regulatory risk, it
13 was prompted in part by other rate case decisions in New York that
14 highlighted the overall risk in the state.³

15 Similarly, Moody's recently issued a credit opinion for PacifiCorp,
16 concluding:

17 The stable outlook incorporates our expectation that PacifiCorp will
18 continue to receive reasonable regulatory treatment...The ratings
19 could be downgraded if...adverse regulatory rulings lower its credit
20 metrics....PacifiCorp's rating recognizes the rate-regulated nature of
21 its electric utility operations which generate stable and predictable
22 cash flows. PacifiCorp operates in regulatory jurisdictions that are
23 reasonably supportive in terms of rate decisions and cost recovery.
24 The ability to use a forward test year in its rate requests helps to limit
25 regulatory lag in Utah, Oregon, Wyoming, and California. The
26 company benefits from energy cost adjustment mechanisms in all its
27 jurisdictions, but in most, some lag remains in recovering portions
28 of the energy costs.⁴

29 Therefore, rate decisions by utility commissions have a direct and significant
30 impact on the financial condition of utilities.

³ S&P Ratings Direct - Assessing U.S. Investor-Owned Utility Regulatory Environments (August 10, 2016).

⁴ Moody's Credit Opinion of PacifiCorp (April 7, 2017).

1 **Q. How does the maintenance of PacifiCorp's current credit ratings benefit**
2 **customers?**

3 A. PacifiCorp is in the midst of a period of significant capital spending and investing in
4 infrastructure to build an energy future that is reliable, clean, and affordable. If
5 PacifiCorp does not have consistent access to the capital markets at reasonable costs,
6 these borrowings and the resulting costs of building new facilities become more
7 expensive than it otherwise would be. The inability to access financial markets can
8 threaten the completion of necessary projects and can impact system reliability and
9 customer safety. Maintaining the current single A credit rating makes it more likely
10 PacifiCorp will have access to the capital markets at reasonable costs even during
11 periods of financial turmoil. Such a rating will allow PacifiCorp continued access to
12 the capital markets that will enable it to fulfill its capital investments for the benefit of
13 customers.

14 **Q. Can you provide an example of how the current ratings have benefited**
15 **customers?**

16 A. Yes. One example is PacifiCorp's ability to significantly reduce its cost of long-term
17 debt primarily through obtaining new financings at very attractive interest rates. The
18 lower cost of debt benefits customers via lower overall rate of return and lower
19 revenue requirements.

20 To determine the savings realized from maintaining a higher credit rating, in
21 Exhibit PAC/303 I compared the actual effective interest rate on the company's debt
22 issuances since its acquisition by BHE in 2006 to what the effective interest rate
23 would have been with a BBB credit rating. Since the BHE acquisition PacifiCorp has

1 had 13 debt issuances and the spread of each issuance was changed to match what a
2 BBB rated utility achieved at about the same point in time that PacifiCorp issued the
3 debt. The result is that on the 13 series of debt averaging \$4.7 billion over the Test
4 Period, the effective interest rate would have been approximately 5.65 percent, or
5 67 basis points higher than the actual effective interest rate. Combined with the
6 existing pre-acquisition debt and projected new debt issuances, the resulting overall
7 cost of long-term debt would increase to 5.47 percent if the company had a BBB
8 rating. PacifiCorp is currently projecting an overall cost of long-term debt of
9 5.05 percent, or 42 basis points lower than it might otherwise be under the scenario
10 I described above.

11 **Q. Are there other identifiable advantages to a favorable rating?**

12 A. Yes. Higher-rated companies have greater access to the long-term markets for power
13 purchases and sales. Such access provides these companies with more alternatives
14 when attempting to meet the current and future load requirements of their customers.
15 Additionally, a company with strong ratings will often avoid having to meet costly
16 collateral requirements that are typically imposed on lower-rated companies when
17 securing power in these markets.

18 In my opinion, maintaining the current single A rating provides the best
19 balance between costs and continued access to the capital markets, which is necessary
20 to fund capital projects for the benefit of customers.

21 **Q. Is the proposed capital structure consistent with PacifiCorp's current credit
22 rating?**

23 A. Yes. This capital structure is intended to enable the company to deliver its required

1 capital expenditures and achieve financial metrics that will meet rating agency
2 expectations. Moody's stated its expectations for PacifiCorp in their April 7, 2017

3 Credit Opinion of PacifiCorp:

4 The stable outlook incorporates our expectation that PacifiCorp will
5 continue to receive reasonable regulatory treatment, and that the
6 funding requirements will be financed in a manner consistent with
7 management's commitment to maintain a healthy financial profile.
8 We anticipate that PacifiCorp's credit metrics will be sustained at
9 about current levels, for example, CFO pre-W/C/Debt in the low
10 20% range.

11 **Q. Does PacifiCorp's credit rating benefit because of BHE and its parent Berkshire
12 Hathaway, Inc. (BRK)?**

13 A. Yes. Although ring-fenced, PacifiCorp's credit ratios have been weak for the ratings
14 level. PacifiCorp has been able to sustain its ratings in part through the acquisition by
15 BHE and its parent, BRK. S&P was very clear on this point in their June 27, 2016
16 assessment of PacifiCorp:

17 The stable rating outlook on PacifiCorp is based on that of parent
18 Berkshire Hathaway Energy Co. (BHE). This reflects our
19 expectation that its relationship to its parent does not change and
20 that management will continue to focus on its core utility operations
21 and reach constructive regulatory outcomes that support the existing
22 business risk. Although BHE has used significant debt leverage for
23 acquisitions and capital investments, we expect credit measures to
24 strengthen to support the current rating. Under our base-case
25 forecast, we expect adjusted funds from operations (FFO) to debt to
26 range from 15% to 16% over the next few years.

27 Moody's states in their April 7, 2017 credit opinion of PacifiCorp:

28 PacifiCorp benefits from its affiliation with BRK, which requires no
29 regular dividends from PacifiCorp or BHE. From a credit
30 perspective, the company's ability to retain its earnings as an entity
31 that is privately held, particularly by a deep-pocketed sponsor like
32 BRK, is an advantage over most other investor owned utilities that
33 are typically held to a regular dividend to their shareholders. As an
34 example, PacifiCorp did not pay dividends for the first five years
35 after being acquired by BHE in 2006, and during that time received

1 equity contributions totaling \$1.1 billion from BHE to help
2 PacifiCorp finance its capital expenditures. Its balance sheet has
3 strengthened from this financial policy, and PacifiCorp now pays
4 dividends that are sized to manage PacifiCorp's equity ratio (as
5 measured by unadjusted equity to equity plus debt) around its
6 allowed levels of about 50% (regulations restrict dividends if this
7 ratio falls below 44%). Furthermore, BHE has placed PacifiCorp in
8 a ring-fencing structure that restricts dividends if PacifiCorp's
9 ratings fall to non-investment grade.

10 These examples are evidence of the credit rating benefit resulting from BHE's
11 ownership of PacifiCorp.

12 **Q. How did PacifiCorp determine the capital structure proposed in this case?**

13 A. The Test Period in this proceeding is the 12 months ending December 31, 2019. To
14 appropriately match PacifiCorp's costs with customer prices during the period, the
15 capital structure is based on the actual capital structure at September 30, 2017, and
16 forecasted capital activity, including known and measurable changes, through
17 December 31, 2019. PacifiCorp has averaged the five quarter-end capital structures
18 measured beginning at December 31, 2018, and concluding with December 31, 2019.
19 The capital activity includes known maturities of certain debt issues that were
20 outstanding at September 30, 2017, subsequent issuances of long-term debt and any
21 capital contributions received or dividends paid. The known and measurable changes
22 represent actual and forecasted capital activity since September 30, 2017.

23 **Q. How does this capital structure compare with PacifiCorp's last general rate
24 case?**

25 A. The proposed capital structure in this docket has a similar common equity component
26 to PacifiCorp's capital structure stipulated to in PacifiCorp's last general rate case, as
27 demonstrated in Table 3.

Table 3: Capital Structure Overview

	2019 GRC Proposal	Adopted in Last GRC (A.09-11-015)
Long-Term Debt	48.02%	47.50%
Preferred Stock	0.02%	0.30%
Common Equity	51.96%	52.20%

1 **Q. How does U.S. tax reform impact PacifiCorp’s capital structure?**

2 A. The three main rating agencies have issued reports on the impact of tax reform on
3 U.S. utilities and their holding companies and believe that tax reform will be
4 unfavorable to utilities in the near term but with regulatory support for a stronger
5 capital structure, highly rated utilities may retain positive credit ratings. For example,
6 S&P determined:

7 The impact could be sharpened or softened by regulators depending
8 on how much they want to lower utility rates immediately instead of
9 using some of the lower revenue requirement from tax reform to
10 allow the utility to retain the cash for infrastructure investment or
11 other expenses. Regulators must also recognize that tax reform is a
12 strain on utility credit quality, and we expect companies to request
13 stronger capital structures and other means to offset some of the
14 negative impact.⁵

15 As such, PacifiCorp is proposing in this case to use a capital structure that does not
16 significantly reduce the common equity from the capital structure stipulated in the last
17 general rate case.

18 **Q. How does PacifiCorp determine the amount of common equity, debt and
19 preferred stock to be included in its capital structure?**

20 A. As a regulated public utility, PacifiCorp has a duty and an obligation to provide safe,

⁵ S&P Ratings Direct - U.S. Tax Reform: For Utilities’ Credit Quality, Challenges Abound (January 24, 2018).

1 adequate and reliable service to customers in its California service territory while
2 prudently balancing cost and risk. Significant capital expenditures are required for
3 new plant investment to fulfill its service obligation, including, capital expenditures
4 for repowering wind projects and significant transmission. These capital investments
5 also have associated operating and maintenance costs. Through its planning process,
6 PacifiCorp determined the amount of necessary new financing needed to support
7 these activities and to provide financial results and credit ratings that balance the cost
8 of capital with continued access to the financial markets.

9 **Q. Please describe the changes to the amount of outstanding long-term debt before**
10 **the forecast Test Period.**

11 A. Before the Test Period, during the period of September 30, 2017, through December
12 31, 2018, the balance of outstanding long-term debt will change through scheduled
13 principal maturities totaling \$588 million and expected new long-term debt issuances
14 of \$650 million with a projected weighted average coupon rate of 3.85 percent.

15 These new long-term debt issuances are included in the proposed capital structure and
16 the expected costs of each issuance are included in the cost of debt calculation.

17 **Rating Agency Debt Imputations**

18 **Q. Is PacifiCorp subject to rating agency debt imputation associated with Purchase**
19 **Power Agreements (PPAs)?**

20 A. Yes. Rating agencies and financial analysts consider PPAs to be debt-like and will
21 impute debt and related interest when calculating financial ratios. For example, S&P
22 will adjust PacifiCorp's published financial results and impute debt balances and
23 interest expense resulting from PPAs when assessing creditworthiness. They do so in

1 order to obtain a more accurate assessment of a company's financial commitments
2 and fixed payments. S&P Ratings Direct November 19, 2013, is a publication by
3 S&P detailing its view of the debt aspects of PPAs and other debt imputations.⁶

4 **Q. How does this impact PacifiCorp?**

5 A. In their most recent evaluation of PacifiCorp, S&P added approximately \$606 million
6 of additional debt and \$31 million of related interest expense to the company's debt
7 and coverage tests for PPAs and other liabilities of the company that are considered to
8 be debt-like by S&P.

9 **Q. How would the inclusion of the PPA-related debt and these other adjustments**
10 **affect PacifiCorp's capital structure as S&P reviews the company's credit**
11 **metrics?**

12 A. Negatively. By including the imputed debt resulting from PPAs and these other
13 adjustments, PacifiCorp's capital structure has a lower equity component as a
14 corollary to the higher debt component, lower coverage ratios and reduced financial
15 flexibility than what might otherwise appear to be the case from a review of the book
16 value capital structure. For example, as shown in Table 4, if one were to apply the
17 total \$606 million amount of debt adjustments that S&P has most recently made to
18 PacifiCorp's capital structure to this case, the resulting common equity percentage
19 would decline from 52.0 percent to 50.0 percent. The corresponding higher average
20 adjusted debt to total capitalization percentage of 50.0 percent over the Test Period
21 reflects an adjusted capital structure that approaches the 50/50 percent mix of debt
22 and common equity capital that PacifiCorp targets than otherwise would be the case.

⁶ Exhibit PAC/304.

Table 4: Rating Agency Adjusted Capital

	Proposed Capital Structure		Rating	Adjusted Capital Structure	
	Book Values \$ (millions)	% of Total		Book Values \$ (millions)	% of Total
Long-Term	\$7,545	48.02%	\$606	\$8,151	49.96%
Preferred Stock	\$2	0.02%	\$0	\$2	0.01%
Common	\$8,164	51.96%	\$0	\$8,164	50.03%
Totals	\$15,711	100.0%	\$606	\$16,317	100.0%

1 **Financing Cost Calculations**

2 **Q. How did you calculate PacifiCorp’s embedded costs of long-term debt and**
3 **preferred stock?**

4 A. I calculated the embedded costs of debt and preferred stock using the methodology
5 relied upon in PacifiCorp’s last general rate case in California and other jurisdictions.

6 **Q. Please explain the cost of long-term debt calculation.**

7 A. I calculated the cost of debt by issue, based on each debt series’ interest rate and net
8 proceeds at the issuance date, to produce a bond yield to maturity for each series of
9 debt. It should be noted that in the event a bond was issued to refinance a higher cost
10 bond, the pre-tax premium and unamortized costs, if any, associated with the
11 refinancing were subtracted from the net proceeds of the bonds that were issued.
12 Each bond yield was then multiplied by the principal amount outstanding of each debt
13 issue, resulting in an annualized cost of each debt issue. Aggregating the annual cost
14 of each debt issue produces the total annualized cost of debt. Dividing the total
15 annualized cost of debt by the total principal amount of debt outstanding produces the
16 weighted average cost for all debt issues. This is PacifiCorp’s embedded cost of
17 long-term debt.

1 **Q. A portion of the securities in PacifiCorp's debt portfolio bears variable rates.**

2 **What is the basis for the projected interest rates used by PacifiCorp?**

3 A. The company's variable rate long-term debt in this case is in the form of tax-exempt
4 debt. Exhibit PAC/305, Variable Rate PCRB,⁷ shows that, on average, these
5 securities have been trading at approximately 85 percent of the 30-day London Inter
6 Bank Offer Rate (LIBOR) for the period January 2000 through December 2017.
7 Therefore, the company has applied a factor of 85 percent to the forward 30-day
8 LIBOR rates at each future quarter-end spanning the Test Period and then added the
9 respective credit enhancement and remarketing fees for each floating rate tax-exempt
10 bond. Credit enhancement and remarketing fees are included in the interest
11 component because these are costs which contribute directly to the interest rate on the
12 securities and are charged to interest expense. This method is consistent with the
13 company's past practices when determining the cost of debt in previous California
14 general rate cases as well as the other states that regulate PacifiCorp.

15 **Q. How did you calculate the embedded cost of preferred stock?**

16 A. The embedded cost of preferred stock was calculated by first determining the cost of
17 money for each issue. I begin by dividing the annual dividend per share by the per
18 share net proceeds for each series of preferred stock. The resulting cost rate
19 associated with each series was then multiplied by the total par or stated value
20 outstanding for each issue to yield the annualized cost for each issue. The sum of
21 annualized costs for each issue produces the total annual cost for the entire preferred
22 stock portfolio. I then divided the total annual cost by the total amount of preferred

⁷ Pollution Control Revenue Bond.

1 stock outstanding to produce the weighted average cost for all issues. The result is
2 PacifiCorp's embedded cost of preferred stock.

3 **Embedded Cost of Long-Term Debt**

4 **Q. What is PacifiCorp's embedded cost of long-term debt?**

5 A. The cost of long-term debt is 5.05 percent for the period ending December 31, 2019,
6 as shown in Exhibit PAC/301, Cost of Long-Term Debt.

7 **Embedded Cost of Preferred Stock**

8 **Q. What is PacifiCorp's embedded cost of preferred stock?**

9 A. Exhibit PAC/306, Cost of Preferred Stock, shows the embedded costs of preferred
10 stock for the period ending December 31, 2019, to be 6.75 percent.

11 **Q. Does this conclude your direct testimony?**

12 A. Yes.