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January 7, 2016

VIA ELECTRONIC FILING
AND OVERNIGHT DELIVERY

Steven V. King
Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Drive SW
P.O. Box 47250
Olympia, Washington 98504-7250

RE: Docket UE-152253—Pacific Power & Light Company's Supplemental Direct Testimony and Exhibits

Pacific Power & Light Company (Pacific Power or Company), a division of PacifiCorp, submits for filing the supplemental direct testimony and exhibits of Bruce N. Williams.

If you have any informal inquiries regarding this matter, please contact Ariel Son, Regulatory Projects Manager, at (503) 813-5410.

Sincerely,

R. Bryce Dalley
Vice President, Regulation

Enclosures

CERTIFICATE OF SERVICE

I hereby certify that I have this day served this document upon all parties of record in this proceeding by electronic mail and/or Overnight Delivery.

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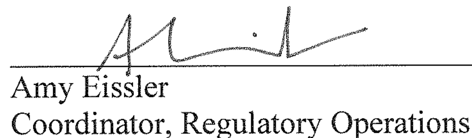
DATED at Portland, OR this 7th day of January 2016.



Amy Eissler
Coordinator, Regulatory Operations

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Exhibit No. RBW-1T
Docket UE-152253
Witness: Bruce N. Williams

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of PACIFIC POWER & LIGHT COMPANY, Petition For a Rate Increase Based on a Modified Commission Basis Report, Two-Year Rate Plan, and Decoupling Mechanism.	Docket UE-152253

PACIFIC POWER & LIGHT COMPANY

SUPPLEMENTAL DIRECT TESTIMONY OF BRUCE N. WILLIAMS

January 2016

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1 **Q. Please state your name, business address, and present position with PacifiCorp.**

2 A. My name is Bruce N. Williams. My business address is 825 NE Multnomah Street,
3 Suite 1900, Portland, Oregon 97232. My present position is Vice President and
4 Treasurer. I am testifying for Pacific Power & Light Company (Pacific Power or
5 Company), a division of PacifiCorp.

6 **QUALIFICATIONS**

7 **Q. Please describe your education and professional experience.**

8 A. I received a Bachelor of Science degree in Business Administration with a
9 concentration in Finance from Oregon State University in 1980. I also received the
10 Chartered Financial Analyst designation upon passing the examination in 1986.
11 I have been employed by the Company for over 30 years. My business experience
12 has included financing of the Company's electric operations and non-utility activities,
13 responsibility for the investment management of the Company's qualified and non-
14 qualified retirement plan assets, investor relations and credit risk management.

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

16 A. I am responsible for the Company's treasury, pension, and other investment
17 management activities. I am also responsible for the preparation of the Company's
18 embedded cost of debt and preferred equity and any associated testimony related to
19 capital structure for regulatory filings in all of the Company's state and federal
20 jurisdictions, including the Washington Utilities and Transportation Commission
21 (Commission).

1 **SUMMARY OF TESTIMONY**

2 **Q. Why are you providing this supplemental direct testimony?**

3 A. At the suggestion of Commission Staff, the Company agreed to file supplemental
4 direct testimony to address two discrete issues relating to the Company's cost of
5 capital. This supplemental filing was discussed at the December 22, 2015 prehearing
6 conference and is referenced in Order 03 in this docket.

7 **Q. What are the two issues?**

8 A. My testimony updates Pacific Power's long-term cost of debt and provides additional
9 information on the Company's current short-term cost of debt and capital structure.
10 Additionally, I update and briefly discuss the Company's current credit ratings.

11 **Q. Does the Company propose to change any component of cost of capital in this**
12 **case?**

13 A. No. The Company's petition does not propose to change any element of its cost of
14 capital. The information I provide demonstrates that the Company's long-term cost
15 of debt remains substantially similar to the level approved in the Company's last
16 general rate case, Docket UE-140762 (2014 Rate Case). While the Federal Reserve
17 Bank's decision to begin the normalization of interest rates at their December 16,
18 2015 meeting will likely increase the Company's cost of debt, in the overall context
19 of the petition, the Company believes it is reasonable to maintain the Company's
20 current debt costs and avoid litigation of cost of capital issues.

21 **UPDATED LONG-TERM COST OF DEBT**

22 **Q. How did you calculate Pacific Power's embedded costs of long-term debt?**

23 A. I calculated the embedded cost of long-term debt using the methodology relied upon

1 in the Company's previous rate cases in Washington and other jurisdictions. I
2 projected the cost of debt for June 30, 2016, just before the July 1, 2016 rate effective
3 date in the schedule the Commission adopted in Order 03.

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

5 A. The cost of long-term debt is 5.21 percent at June 30, 2016, as shown in
6 Exhibit No. BNW-5. This is slightly higher than the Company's current 5.19 percent
7 long-term cost of debt approved in the Company's 2014 Rate Case.

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

9 A. I calculated the cost of debt by issue, based on each debt series' interest rate and net
10 proceeds at the issuance date, to produce a bond yield to maturity for each series of
11 debt. It should be noted that if a bond was issued to refinance a higher cost bond, the
12 pre-tax premium and unamortized costs, if any, associated with the refinancing were
13 subtracted from the net proceeds of the bonds that were issued. Each bond yield was
14 then multiplied by the principal amount outstanding of each debt issue, resulting in an
15 annualized cost of each debt issue. Aggregating the annual cost of each debt issue
16 produces the total annualized cost of debt. Dividing the total annualized cost of debt
17 by the total principal amount of debt outstanding produces the weighted average cost
18 for all debt issues. This results in Pacific Power's 5.21 percent cost of long-term
19 debt.

20 **Q. A portion of the securities in the Company's debt portfolio bears variable rates.**
21 **What is the basis for the projected interest rates used for these securities?**

22 A. The Company's variable rate long-term debt in this case is in the form of tax-exempt
23 debt. Exhibit No. BNW-6 shows that, on average, these securities have been trading

1 at approximately 86 percent of the 30-day London Interbank Offered Rate (LIBOR)
2 rate for the period January 2000 through November 2015. Therefore, the Company
3 has applied a factor of 86 percent to the forward 30-day LIBOR rate at June 30, 2016,
4 and then added the respective credit enhancement and remarketing fees for each
5 variable rate tax-exempt bond. Credit enhancement and remarketing fees are
6 included in the interest component because these are costs which contribute directly
7 to the interest rate on the securities and are charged to interest expense. This method
8 is consistent with the Company's past practices when calculating the cost of debt in
9 previous Washington general rate cases and in the Company's other jurisdictions.

10 **Q. Based on your analysis, have there been any material changes in the Company's**
11 **long-term debt costs since the 2014 Rate Case?**

12 A. No. The current cost of long-term debt is substantially similar to the currently
13 approved cost of long-term debt.

14 **Q. Did the Company also project its cost of short-term debt?**

15 A. Yes, I prepared this estimate even though the Company continues to maintain
16 negligible amounts of short-term debt in its capital structure. I projected the
17 Company's cost of short-term debt for June 30, 2016, just before the July 1, 2016,
18 rate effective date. The cost of short-term debt is 2.15 percent higher than the
19 1.73 percent cost the Commission set in the 2014 Rate Case. This projection is
20 derived from forward LIBOR rates plus the contractual borrowing margin in
21 committed credit agreements at the Company's current ratings plus related fees and
22 expenses. This is the same way I determined the cost of short-term debt in the
23 Company's 2014 Rate Case, which was approved by the Commission.

1 **Q. Based on your analysis, have there been any material changes in the Company's**
2 **short-term debt costs since the 2014 Rate Case?**
3 A. Yes. The projected cost of short-term debt is higher than the currently approved cost,
4 reflecting an increase in interest rates. The small amount of short-term debt in the
5 Company's capital structure, however, means that this change does not materially
6 impact the Company's overall cost of capital.
7 **Q. Please summarize your update to the Company's cost of debt.**
8 A. Table 1 compares the cost of short-term and long-term debt approved in the
9 Company's 2014 Rate Case and PacifiCorp's projected short-term and long-term cost
10 of debt as of the July 1, 2016 rate effective date in this case.[1]

Table 1

COST OF DEBT		
	Approved 2014 Rate Case	Updated for July 1, 2016
Cost of Long-Term Debt	5.19%	5.21%
Cost of Short-Term Debt	1.73%	2.15%

11 **CAPITAL STRUCTURE**
12 **Q. What is the Company's capital structure?**
13 A. Using an average of the five quarter-ends for the twelve months ending June 30, 2016
14 produces the following capital structure, which is compared to the ordered 2014 Rate
15 Case capital structure below:

[1] *Wash. Utils. & Transp. Comm'n v. Pacific Power & Light Co.*, Dockets UE-140762 *et al.*, Order 08 at 77-78, ¶ 183 (Mar. 25, 2015).

Table 2

CAPITAL STRUCTURE		
	Approved 2014 Rate Case	Updated for July 1, 2016
Short-Term Debt	0.19%	0.04%
Long-Term Debt	50.69%	48.91%
Preferred Stock	0.02%	0.02%
Common Equity	49.10%	51.03%

1 **Q. Is the Company proposing that the actual capital structure be used for**
2 **determining the revenue requirement in this docket?**
3 A. No. As noted earlier, the Company is not proposing to change any component of cost
4 of capital in this case. I am presenting this updated capital structure to respond to
5 Staff's request for additional evidence on the Company's updated cost of capital. My
6 testimony shows that the Company continues to have a common equity level above
7 the hypothetical capital structure approved in the Company's 2014 Rate Case.

8 **CREDIT RATINGS**

9 **Q. What are PacifiCorp's current credit ratings?**
10 A. PacifiCorp's current ratings are:

Table 3

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

11 **Q. Has any credit agency changed PacifiCorp's credit rating since the 2014 Rate**
12 **Case?**
13 A. Yes. In November 2015, Fitch Ratings upgraded PacifiCorp's Issuer Default Rating
14 and securities ratings one notch.

1 **Q. Please explain why Fitch Ratings made this change.**

2 A. Fitch stated that the ratings reflect the Company's "strong credit metrics, balanced
3 jurisdictional regulatory environment and meaningfully lower estimated 2015-2019
4 capex compared to historic levels. [PacifiCorp's] business risk is relatively low and
5 retail rates below the industry average."[2]

6 **Q. Did Fitch Ratings address recent Washington rate decisions in its credit rating**
7 **report?**

8 A. Yes. The portions of the report addressing Washington are quoted below:

> 9 Regulatory outcomes across [PacifiCorp's] service territory
> 10 have been and are expected to continue to be balanced with
> 11 the notable exception of Washington….Washington Utilities
> 12 and Transportation Commission (WUTC) rulings in
> 13 [PacifiCorp's] GRCs issued in March 2015 and December
> 14 2013 were notably unfavorable for investors. The WUTC
> 15 orders disallowed costs related to purchased power from
> 16 qualifying facilities located outside the state of Washington
> 17 and authorized a below-industry-average 9.5% ROE. In its
> 18 March 2015 order, the WUTC authorized a rate increase of
> 19 $9.6 million, 32% of the $30.4 million requested by
> 20 [PacifiCorp] in the proceeding. In its December 2013 order,
> 21 the WUTC approved a $17 million rate increase,
> 22 approximately 46% of [PacifiCorp's] requested $37 million
> 23 rate hike. [PacifiCorp] has appealed both WUTC orders.
> 24 Fitch notes that the WUTC earlier this year approved an all-
> 25 party stipulation in which the parties agreed to the
> 26 implementation of a power cost adjustment mechanism, which
> 27 includes dead bands and sharing of deferred balances between
> 28 the utility and ratepayers."

29 **Q. Does the Company's petition address some of the concerns expressed by Fitch**
30 **Ratings and provide additional support for its current credit ratings?**

31 A. Yes. If the Commission approves the Company's petition, this would improve Pacific
32 Power's financial integrity and send a positive signal to rating agencies that the

[2] Fitch Ratings, November 24, 2015. Attached as Exhibit No. BNW-2.

1 regulatory framework in Washington is constructively addressing cost recovery. This
2 would benefit customers and the Company.

3 **Q. Why should this Commission be concerned about credit ratings and the views**
4 **expressed by rating agencies?**

5 A. Credit ratings and the views of rating agencies are important for several reasons.
6 First, the credit rating of a utility has a direct impact on the price that a utility pays to
7 attract the capital necessary to support its current and future operating needs. Many
8 institutional investors have fiduciary responsibilities to their clients and are typically
9 not permitted to purchase non-investment grade (*i.e.*, rated below BBB-) securities
10 or, in some cases, even securities rated below single A.

11 Second, credit ratings are an estimate of the probability of default by the
12 issuer on each rated security. Lower ratings equate to higher risks and higher costs of
13 debt.

14 Further, the Company has a near constant need for short-term liquidity as well
15 as periodic long-term debt issuances. On a daily basis, the Company pays significant
16 amounts to suppliers to provide necessary goods and services, such as fuel, spare
17 parts, and inventory. Being unable to access funds can jeopardize the successful
18 completion of necessary capital infrastructure projects and would increase the chance
19 of outages and service failures over the long term.

20 **Q. Do PacifiCorp's current credit ratings benefit customers?**

21 A. Yes. The Company is in the process of completing significant new plant investments
22 that span multiple years. These investments include required pollution control
23 equipment, transmission facilities, and other capital investments to properly maintain

1 the existing infrastructure. These investments support system reliability, improve
2 power delivery, and help to ensure safe operation for the benefit of customers and
3 meet regulatory and legislative mandates. If the Company does not have consistent
4 access to the capital markets at reasonable costs, these borrowings and the resulting
5 costs to build new and maintain existing facilities become more expensive than they
6 otherwise would be. All of the resulting higher costs are ultimately borne by
7 customers. Maintaining the current credit rating for senior secured debt makes it
8 more likely that the Company will have access to the capital markets at reasonable
9 costs even during periods of financial turmoil. This rating will allow the Company
10 continued access to the capital markets, which will enable it to fulfill its capital
11 investments for the benefit of customers.

12 **Q. Are the Company's current credit ratings similar to those in effect when you**
13 **filed testimony in the Company's 2014 Rate Case?**

14 A. Yes. While Fitch has upgraded the Company by one notch, Moody's and Standard &
15 Poor's have not changed their credit ratings. These credit rating are substantially
16 similar to the 2014 Rate Case credit ratings. I have attached the most recent credit
17 rating reports as exhibits to my supplemental direct testimony.

18 **Q. Does this conclude your supplemental direct testimony?**

19 A. Yes.

Exhibit No. BNW-2
Docket UE-152253
Witness: Bruce N. Williams

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of PACIFIC POWER & LIGHT COMPANY, Petition For a Rate Increase Based on a Modified Commission Basis Report, Two-Year Rate Plan, and Decoupling Mechanism.	Docket UE-152253

PACIFIC POWER & LIGHT COMPANY

EXHIBIT OF BRUCE N. WILLIAMS

Fitch Ratings (November 24, 2015)

January 2016

FitchRatings

FITCH AFFIRMS BERKSHIRE HATHAWAY ENERGY CO & SUBS; UPGRADES PPW; OUTLOOK STABLE

Fitch Ratings-New York-24 November 2015: Fitch Ratings has affirmed the ratings of Berkshire Hathaway Energy Company (BHE) and certain of its subsidiaries. The Rating Outlook for BHE is Stable.

Additionally, Fitch has upgraded PacifiCorp's (PPW's) Issuer Default Rating (IDR) to 'A-' from 'BBB+' and its securities ratings one notch as indicated at the end of this release. The Rating Outlook for PPW is Stable. The upgrade reflects PPW's solid underlying credit metrics, balanced regulation, competitive rates, and manageable capex.

Fitch has affirmed the IDR and securities ratings for the following BHE subsidiaries: MidAmerican Funding LLC (MF), MidAmerican Energy Co. (MEC), NV Energy, Inc. (NVE), Nevada Power Co. (NPC), Sierra Pacific Power Company (SPPC), Northern Natural Gas Company (NNG) and Kern River Funding Corp. (KRF). The Rating Outlook for these BHE subsidiaries is Stable.

A complete list of rating actions follows at the end of this release.

KEY RATING DRIVERS

--Ownership of BHE by Berkshire Hathaway, Inc. (BRK; IDR 'AA-'/Outlook Stable) and enhanced group funding and capital retention capabilities;
--Strong, parent-only cash generation;
--Diverse utility and utility-like, low-risk businesses provide strong, predictable earnings and cash flows;
--Constructive regulatory compacts across BHE's asset base with balanced general rate case outcomes.

BHE Ownership:
The ratings consider the favorable impact of BRK's 90% ownership of BHE by BRK. Ownership of BHE by BRK affords the former with the ability to retain capital typically paid out in the form of dividends by publicly held investor-owned-utilities (IOUs). This dynamic is a function of BRK's strong credit profile, large cash position ($56.2 billion as of Sept. 30, 2015) and investment appetite. As a result, Fitch estimates that BHE will be free cash flow (FCF) positive and that consolidated debt will decline 2015-2019. Other benefits include BRK's ability to utilize tax shields and fund strategic growth opportunities.

Diversified, Regulated Asset Base:
BHE's ratings are supported by its large high-quality portfolio of utility and utility-like assets primarily located in the U.S., Canada and Great Britain. BHE owns three large integrated electric utilities with generally constructive regulatory compacts and moderately above industry average growth trends, operating in the U.S. Rocky Mountain/Pacific Northwest, Midwest and Desert Southwest regions. Consolidated BHE leverage is high. However, future cash flows from BHE's diverse portfolio of businesses are projected by Fitch to amply cover its estimated parent-only obligations.

M&A: BHE has been an active consolidator in the utility, power and gas sector, acquiring high quality, low-risk electric and gas utility, electric transmission and natural gas pipeline assets. Large acquisitions in recent years include AltaLink, L.P. in 2014 and NVE (IDR 'BBB-'; Stable Outlook)

in 2013. The impact of M&A on BHE's credit quality will be driven by price, asset quality and funding choices. Debt funded acquisitions and/or acquisition of high risk profile businesses could challenge future credit quality.

Consolidated Financial Metrics: The recent acceleration of BHE M&A activity and associated increase in parent-company leverage is estimated by Fitch Ratings to pressure BHE's consolidated credit metrics. Fitch projects BHE funds from operations (FFO) coverage and leverage ratios will range from 3.8x to 4.3x and 5.0x to 4.5x, respectively, during 2015-2019.

PPW Upgrade & Stable Outlook:

PPW's ratings and Stable Rating Outlook reflect PPW's strong credit metrics, balanced jurisdictional regulatory environment and meaningfully lower estimated 2015-2019 capex compared to historic levels. PPW's business risk is relatively low and retail rates below the industry average.

Fitch forecasts FFO coverage and leverage ratios will approximate 5.0x and 3.8x or better, respectively, consistent with target medians for the 'A-' IDR.

Regulatory Overview: The utility's multi-state service territory and diversified regulatory environment support the ratings and Rating Outlook Stable. PPW operates in six states: Utah, Wyoming, Idaho, Oregon, Washington and California.

Regulatory outcomes across PPW's service territory have been and are expected to continue to be balanced with the notable exception of Washington. Various riders are in place to facilitate recovery of certain costs outside of general rate cases (GRC), including fuel adjustment clauses that mitigate commodity price exposure in all of PPW's regulatory jurisdictions.

PPW filed a GRC with the Wyoming Public Service Commission (WPSC) in March 2015 and currently supports a $27 million (4%) rate increase. The requested rate hike is based on a 9.85% authorized return on equity (ROE), 51.4% equity ratio and a test year ending Dec. 31, 2016. A final order in the GRC is expected later this year. In its previous Wyoming rate case, the WPSC granted PPW a $20.2 million rate increase based on a below-industry-average 9.5% authorized ROE. The December 2014 WPSC authorized rate increase represented approximately 62% of the company supported $32.6 million rate increase rate increase request.

In Fitch's opinion, WPSC rate orders have been supportive from a creditworthiness point-of-view, providing the company with a reasonable opportunity to earn its authorized ROE, notwithstanding the below-industry-average ROE adopted by the commission in PPW's previous GRC.

Washington Utilities and Transportation Commission (WUTC) rulings in PPW GRCs issued in March 2015 and December 2013 were notably unfavorable for investors. The WUTC orders disallowed costs related to purchased power from qualifying facilities located outside the state of Washington and authorized a below-industry-average 9.5% ROE. In its March 2015 order, the WUTC authorized a rate increase of $9.6 million, 32% of the $30.4 million requested by PPW in the proceeding. In its December 2013 order, the WUTC approved a $17 million rate increase, approximately 46% of PPW's requested $37 million rate hike. PPW has appealed both WUTC orders. Fitch notes that the WUTC earlier this year approved an all-party stipulation in which the parties agreed to the implementation of a power cost adjustment mechanism, which includes dead bands and sharing of deferred balances between the utility and ratepayers.

Manageable Capex: PPW's annual capex was essentially flat in 2014 and 2013 at $1.065 billion and $1.066 billion, respectively, 21% below 2012 capex of $1.346 billion. Capex averaged $1.5

billion per year in 2010-2012. Projected 2015-2017 capex approximates $842 million per year on average, more than 40% below PPW's $1.5 billion 2010-2012 capex.

Meaningfully lower projected PPW capex reflects completion of large capital projects, including major transmission, natural gas generation and renewables investment in the past several years. In addition, capex incorporates slower PPW service territory load growth and efforts by management to minimize customer rate increases.

Slowing PPW service territory load growth trends are driven primarily, in Fitch's view, by energy efficiency gains and are a source of some uncertainty along with the impact of environmental rules and regulations on PPW's coal-fired generation.

Fitch believes these dynamics are manageable within the regulatory compact and unlikely to meaningfully weaken PPW's creditworthiness in the near to intermediate term. Lower capex is likely to slow the pace of regulatory filings, easing upward pressure on rates.

Efforts by management to minimize customer rate increases while maintaining system reliability, safety and customer service have resulted in generally flat O&M expense.

MF/MEC Ratings Affirmed: The ratings affirmations are based on the credit quality of MEC, an integrated regulated electric utility. MF is an intermediate holding company owned by BHE. MF in turn owns MEC and is dependent on distributions from the utility to meet its ongoing obligations.

MF and MEC's ratings and their respective Stable Rating Outlooks reflect the utility's relatively low business risk profile, solid financial metrics, more diversified fuel-mix in recent years and a balanced regulatory environment in Iowa.

Constructive Iowa Regulatory Compact: MF and MEC's ratings consider the constructive outcome in MEC's last rate case filing. In that proceeding, the Iowa Utilities Board (IUB) increased MEC's base rates $266 million consistent with the company's requested rate increase. The base rate increase will be phased in through Jan. 1, 2016.

In addition, the approved MEC settlement authorized energy and transmission cost adjustment mechanisms. The IUB's order includes revenue sharing based on specific ROE hurdles.

In recent years, MEC has significantly diversified its fuel-mix via meaningful new build wind generation while maintaining rates that that are competitive regionally and compared to the national average. This combined with fuel switching and coal plant retirements should position MEC well for compliance with EPA regulations, including the agency's Clean Power Plan.

Solid Credit Metrics: Fitch estimates that MF and MEC's financial metrics will remain consistent with Fitch's target medians and peers. MF's FFO coverage and leverage ratios are expected to range between 5.3x-7.1x and 3.8x-3.5x, respectively through 2019. The same metrics for MEC are forecast to range between 5.8x-6.9x and 3.6x-3.2x, respectively, over the five-year forecast period.

NVE & Subs Affirmed: The ratings and Rating Outlooks Stable for NVE, NPC and SPPC reflect solid credit metrics that are consistent with target medians. The ratings and outlooks also consider the balanced Nevada regulatory compact, manageable leverage, slowly improving regional market conditions and modest sales growth.

Favorable Nevada Regulation: Under Nevada regulation, GRC filings are required at least every three years with a decision required within seven months from the filing date and adjustments for known and measurable adjustments to the test year; pre-approval of capex; and, timely fuel and purchase power cost recovery mechanisms.

In October 2014, the PUC adopted a modified settlement in NPC's 2014 GRC. NPC filed the GRC with the PUC May 2014 requesting a $20.8 million rate increase based on a 10% ROE. The PUC-approved settlement authorized no change in base rates and modest rate design changes. In Fitch's view, the settlement is credit neutral. SPPC and NPC are scheduled to file triennial rate cases in June 2016 and June 2017, respectively.

Fitch projects NVE FFO coverage and leverage 2015-2019 of 3.8x-4.7x and 4.9x-3.9x, respectively, levels consistent with NVE's 'BBB-' IDR and operating subsidiaries NVP and SPPC's 'BBB' IDRs.

NNG Ratings Affirmed: The ratings and Rating Outlook Stable for NNG reflect the pipeline's strong business position and relatively low business risk profile. NNG's natural gas transportation system is an essential source of contracted supply to its Upper Midwest utility customer base.

Counter-party credit risk is ameliorated by the pipeline's diverse group of primarily highly rated off-takers with multi-year contracts. NNG's ratings also consider the pipeline operator's constructive regulatory compact and its consistent ability to earn reasonable returns on equity, typically in the low double digits.

Fitch projects NNG FFO coverage and leverage 2015-2019 of 5.3x-8.2x and 3.5x-2.2x, respectively, levels consistent with NNG's 'A' IDR.

KRF Ratings Affirmed: The ratings consider KRF's relatively predictable earnings and cash flows, competitive rates, attractive markets, recent success in extending maturing shipper contracts and a balanced FERC regulatory compact. The ratings also consider the pipeline's manageable projected capex, declining debt and improving credit metrics from an already strong base.

The KRF pipeline transports competitive Rocky Mountain natural gas to large volume end-users in Utah, Southern Nevada and Southern California.

KRF coverage and leverage ratios 2015-2019 strongly support its 'A' rating and Stable Rating Outlook. KRF's outstanding debt is expected by Fitch to fully amortize by 2018 with no expectation for issuance of any additional debt.

Re-contracting and more stringent rules regarding pipeline integrity and related issues are potential sources of concern for both NNG and KRF. Fitch believes these concerns are manageable within the pipelines' current rating categories given their strong competitive positions in their respective markets and ongoing infrastructure investment by management.

KEY ASSUMPTIONS
Fitch's key assumptions within the rating case for BHE and its subsidiaries include:

--Estimated 2016-2019 parent-only FCF of $7 billion-$8 billion;
--Repayment of trust preferred issued to fund recent acquisitions by the end of 2016;
--Reasonable outcomes in pending and future operating utility rate case outcomes;
--No meaningful deterioration in key U.S. regulatory jurisdictions;
--Earned returns on equity of better than 10% at MEC and 9%-10% at PPW and NVE;

RATING SENSITIVITIES
Positive: Future developments that may individually or collectively lead to positive credit rating actions for BHE and its subsidiaries include the following.

--BHE: High consolidated leverage limits positive rating actions in the near-to-intermediate term. Nonetheless, improvement in FFO-adjusted leverage to 3.6x-3.8x or better on a sustained basis could result in future credit rating upgrades.

--MF: Structural subordination of MF debt to MEC and current notching requires an upgrade at the utility to accommodate an MF upgrade.

--MEC: The utility's strong credit rating and parent - subsidiary notching considerations limit positive rating actions. However, stable, sustained FFO adjusted coverage and leverage ratios of 5.0x and 3.5x, respectively, or better, could result in future credit rating upgrades.

--PPW: Further positive rating actions for PPW are unlikely in the near-to-intermediate term given the recent upgrade and other considerations. However, further improvement in PPW's FFO coverage and leverage ratios to 5.0x and 3.5x, respectively, in concert with a stable or improving business risk profile could result in future upgrades.

--NVE/NPC/SPPC: Improvement in NVE's FFO and EBITDAR leverage to better than 5.0x and 3.75x, respectively, on a long-term projected basis could lead to a one-notch upgrade for NVE and its operating subsidiaries, NPC and SPPC.

--NNG and KRF: The pipelines' relatively high ratings challenge future positive rating actions.

Future developments that may, individually or collectively, lead to credit rating downgrades include:

--BHE: Deterioration of BHE's FFO adjusted leverage to 5.0x-5.5x or worse on a consistent basis would likely lead to future credit downgrades.

Longer term, a change in ownership structure and/or strategic direction at BRK eliminating or diminishing capital retention and other benefits currently available to BHE would likely lead to future downgrades at the utility holding company and pressure its subsidiaries' ratings as well. Large debt funded M&A transactions and/or acquisition of assets with more volatile cash flows and higher business risk could trigger future credit rating downgrades.

--MF and MEC: A significant deterioration in the regulatory compact in Iowa or other factors causing MEC's FFO leverage weaken to 4.5x or worse on a sustained basis would likely lead to credit rating downgrades for both MEC and MF.

--PPW: An unexpected, sustained weakening of FFO leverage due to deterioration in PPW's regulatory oversight, higher-than-expected capex or other factors to 4.5x or worse could lead to future credit rating downgrades.

--NVE/NPC/SPPC: An unexpected deterioration in the currently constructive regulatory compact in Nevada or other factors pressuring FFO leverage to 6.0x or weaker for NVE could lead to future, adverse rating actions for NVE and its subsidiaries, SPPC and NPC.

--NNG: Deterioration of NNG's FFO leverage to 4.0x or weaker could result in future credit rating downgrades.

--KRF: Given the pipeline's strong operating profile and already low and amortizing debt, credit rating downgrades appear unlikely at this juncture.

LIQUIDITY

BHE's liquidity is strong, with total available consolidated liquidity of $7 billion as of Sept. 30, 2015. Liquidity is composed of BHE's $1.7 billion of consolidated cash on BHE's balance sheet and $5.4 billion of unused borrowing capacity under its $6.7 billion of committed revolving credit facilities. BHE has a $2 billion parent-only credit facility that matures in 2017 and supports its CP program. Debt maturities are manageable, approximating $1.8 billion 2015-2019 on average per annum.

FULL LIST OF RATING ACTIONS

Fitch has taken the following rating actions:

Berkshire Hathaway Energy Co. (BHE)
--Long-term IDR affirmed at 'BBB+';
--Senior unsecured affirmed at 'BBB+';
--Trust Preferred affirmed at 'BBB-';
--Short-term IDR affirmed at 'F2'.

The Rating Outlook is Stable.

PacifiCorp (PPW)
--Long-term IDR upgraded to 'A-' from 'BBB+';
--Senior secured debt upgraded to 'A+' from 'A';
--Senior unsecured debt upgraded to 'A' from 'A-';
--Preferred stock upgraded to 'BBB+' from 'BBB';
--Short-term IDR upgraded to 'F1' from 'F2';
--Commercial paper upgraded to 'F1' from 'F2'.

The Rating Outlook is Stable.

NV Energy (NVE)
--Long-term IDR affirmed at 'BBB-';
--Senior unsecured debt affirmed at 'BBB-'.

The Rating Outlook is Stable.

Nevada Power Co. (NPC)
--Long-term IDR affirmed at 'BBB';
--Senior secured debt affirmed at 'A-';
--Short-term IDR affirmed at F2'.

The Rating Outlook is Stable.

Sierra Pacific Power Co. (SPPC)
--Long-term IDR affirmed at 'BBB';
--Senior secured debt affirmed at 'A-';
--Short-term IDR affirmed at 'F2'.

The Rating Outlook is Stable.

MidAmerican Funding LLC (MF)
--Long-term IDR affirmed at 'BBB+';
--Senior secured debt affirmed at 'A-'.

The Rating Outlook is Stable.

MidAmerican Energy Company (MEC)
--Long-term IDR affirmed at 'A-';
--Senior secured debt affirmed at 'A+';
--Senior unsecured debt affirmed at 'A';
--Short-term IDR affirmed at 'F1';
--Commercial paper affirmed at 'F1'.

The Rating Outlook is Stable.

Kern River Funding Corp. (KRF)
--Long-term IDR affirmed at 'A-';
--Senior unsecured debt affirmed at 'A-'.

The Rating Outlook is Stable.

Northern Natural Gas Co. (NNG)
--Long-term IDR affirmed at 'A';
--Senior unsecured debt affirmed at 'A'.

The Rating Outlook is Stable.

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Applicable Criteria
Corporate Rating Methodology - Including Short-Term Ratings and Parent and Subsidiary Linkage (pub. 17 Aug 2015)
https://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=869362
Treatment and Notching of Hybrids in Non-Financial Corporate and REIT Credit Analysis (pub. 25 Nov 2014)

https://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=821568

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Exhibit No. BNW-3
Docket UE-152253
Witness: Bruce N. Williams

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of PACIFIC POWER & LIGHT COMPANY, Petition For a Rate Increase Based on a Modified Commission Basis Report, Two-Year Rate Plan, and Decoupling Mechanism.	Docket UE-152253

PACIFIC POWER & LIGHT COMPANY

EXHIBIT OF BRUCE N. WILLIAMS

Moody's Investors Service (May 7, 2015)

January 2016

MOODY'S
INVESTORS SERVICE

Credit Opinion: PacifiCorp

Global Credit Research - 07 May 2015

Portland, Oregon, United States

Ratings

Category	Moody's Rating
Outlook	Stable
Issuer Rating	A3
First Mortgage Bonds	A1
Senior Secured	A1
Sr Unsec Bank Credit Facility	A3
Senior Unsecured MTN	(P)A3
Pref. Stock	Baa2
Commercial Paper	P-2
Ult Parent: Berkshire Hathaway Inc.	
Outlook	Stable
Issuer Rating	Aa2
Senior Unsecured	Aa2
ST Issuer Rating	P-1
Parent: Berkshire Hathaway Energy Company	
Outlook	Stable
Sr Unsec Bank Credit Facility	A3
Senior Unsecured	A3
Commercial Paper	P-2

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Key Indicators

[1]**PacifiCorp**

	12/31/2014	12/31/2013	12/31/2012	12/31/2011	12/31/2010
CFO pre-WC + Interest / Interest	**5.0x**	**5.0x**	**4.9x**	**4.8x**	**5.3x**
CFO pre-WC / Debt	**21.0%**	**22.8%**	**21.1%**	**21.0%**	**25.7%**
CFO pre-WC - Dividends / Debt	**11.2%**	**15.6%**	**18.4%**	**13.5%**	**25.7%**
Debt / Capitalization	**37.5%**	**36.7%**	**38.3%**	**39.8%**	**38.8%**

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics

Note: For definitions of Moody's most common ratio terms please see the accompanying User's Guide.

Opinion

Rating Drivers

Reasonably supportive regulatory environment

Well-diversified assets enhanced by entry into the energy imbalance market

Solid credit metrics

Benefits from Berkshire Hathaway affiliation

Corporate Profile

PacifiCorp (A3 senior unsecured, stable) is a vertically integrated electric utility company serving 1.8 million retail electric customers in six states: Utah (44% of PacifiCorp's 2014 retail electricity volumes), Oregon (24%), Wyoming (17%), Washington (8%), Idaho (6%), and California (1%). PacifiCorp also sells power in the wholesale market (16% of 2014 total electricity volumes).

PacifiCorp is the largest subsidiary of Berkshire Hathaway Energy Company (BHE, formerly known as MidAmerican Energy Holdings Co., A3 senior unsecured, stable), comprising 31% of BHE's 2014 EBITDA, pro forma for BHE's AltaLink acquisition. BHE, in turn, is a consolidated subsidiary of Berkshire Hathaway Inc. (BRK, Aa2 Issuer Rating, stable).

SUMMARY RATING RATIONALE

PacifiCorp's ratings are supported by the stability of the utility's regulated cash flows, the geographically diverse and reasonably supportive regulatory environments in which it operates, the diversification of its generation portfolio, and stable credit metrics. The company will have the capacity to generate free cash flow over the next few years as it reduces capital spending. The rating also takes into account PacifiCorp's position as a subsidiary of BHE, a holding company whose subsidiaries are primarily engaged in regulated activities, and the benefits from its affiliation with BRK.

DETAILED RATING CONSIDERATIONS

REASONABLY SUPPORTIVE REGULATORY ENVIRONMENT

PacifiCorp's rating recognizes the rate-regulated nature of its electric utility operations which generate stable and predictable cash flows. PacifiCorp operates in regulatory jurisdictions that are reasonably supportive in terms of rate decisions and cost recovery. The ability to use a forward test year in its rate requests helps to limit regulatory lag in Utah, Oregon, Wyoming, and California. The company has been successful in getting approvals for capital projects, such as its Energy Gateway electric transmission program and the Lake Side 2 gas plant. Most of its jurisdictions do not grant pre-approvals on capital projects; therefore, to avoid disallowances, PacifiCorp has sought special riders or limited-issue proceedings such as in Utah, to recover those costs more quickly without a full rate case. The company has energy cost adjustment mechanisms in all its jurisdictions, except in Washington currently, although some lag remains in recovering portions of its energy costs.

PacifiCorp continues to undergo rounds of rate cases across its jurisdictions, and rate relief is improving returns towards its allowed levels. Its reported ROE has increased from about 8% five years ago to 9.0% in 2014, slightly below recent decisions of 9.5%-9.8%. In addition to a rate case currently underway in Wyoming, the company will likely file rate cases before rate plans end in Idaho (December 2015) and Utah (September 2016). The company's most challenging jurisdiction is Washington, where its returns are the lowest, and where it is appealing its 2013 rate decision, while contesting its most recent March 2015 decision.

Distributed generation (DG) customers, who generate some of their power usually through rooftop solar, account for only 0.5% of PacifiCorp customers, but their numbers are growing. PacifiCorp is proactively seeking rate design changes to ensure its returns against a potential erosion in sales to DG customers. In the March 2015 decision, the Washington commission denied the company's request to raise the fixed basic charge. In PacifiCorp's two largest jurisdictions, dockets are open to study the net metering tariff (Utah) and the value that solar brings to the system (Oregon).

WELL-DIVERSIFIED ASSETS ENHANCED BY ENTRY INTO THE ENERGY IMBALANCE MARKET

PacifiCorp credit profile benefits from being well-diversified in terms of its generation assets and markets. Its

generation portfolio consists of coal (55% net owned capacity), gas (25%), hydro (10%), and wind and other sources (10%). Its sizable coal assets subject PacifiCorp to numerous environmental rules, but the company has made a significant amount of investments already and expects to be in compliance by their deadlines. PacifiCorp's annual environmental budget is well within its means, at about $100 million. The market and customer diversity of PacifiCorp's six-state service territory is favorable, because it mitigates the economic and regulatory impacts in any one jurisdiction.

In November 2014, PacifiCorp launched an energy imbalance market (EIM) in partnership with the California Independent System Operator Corporation (CAISO). EIM is an automated system that matches least-cost electricity supply with demand every five minutes. This real-time dispatching system replaced a less efficient hourly, manual process and integrated PacifiCorp's large, disperse Rocky Mountain and Pacific Power networks with the California grid. EIM benefits PacifiCorp by: expanding the market for its generation (including the second-largest utility owned wind fleet in the US) and transmission assets; enhancing reliability; reducing the need to invest in reserves and more generation; and improving the integration of renewables and helping the company to meet the renewable portfolio standards in its service territories. PacifiCorp and CAISO project that EIM will yield a range of $21-$129 million a year of customer savings.

SOLID CREDIT METRICS

Expecting flat load growth, and seeking to temper rate increases, the company has cut its capital budget to average $842 million over the 2015-2017 period, which is less than 40% of its 2009 expenditures. Capex coming down closer to depreciation expense will result in rate base being maintained near current levels. The extension of bonus depreciation for another year will result in a temporary rise in cash flow from operations in 2015, before returning to a run-rate of $1.5 billion.

PacifiCorp posts solid credit metrics. Its 2014 ratios have changed little over the last three years. The ratio of cash from operations before changes in working capital (CFO pre-W/C)/Debt was 21%, CFO pre-W/C plus Interest/Interest was 5.0x, Debt/Book Capitalization was 38%. Its CFO pre-W/C - Dividends/Debt (11% in 2014 vs. 26% in the 2009-10 period when it paid no dividends) will go down and become more variable, as PacifiCorp will have more free cash flow to pay out. We expect the company to size debt issuances and dividends to maintain its current capital structure.

BENEFITS FROM BERKSHIRE HATHAWAY AFFILIATION

PacifiCorp benefits from its affiliation with BRK, which requires no regular dividends from PacifiCorp or BHE. From a credit perspective, the company's ability to retain its earnings as an entity that is privately held, particularly by a deep-pocketed sponsor like BRK, is an advantage over most other investor owned utilities that are typically held to a regular dividend to their shareholders.

As an example, PacifiCorp did not pay dividends for the first five years after being acquired by BHE in 2006, and during that time received equity contributions totaling $1.1 billion from BHE to help PacifiCorp finance its capital expenditures. Its balance sheet has strengthened from this financial policy, and PacifiCorp now pays dividends that are sized to manage PacifiCorp's equity ratio (as measured by unadjusted equity to equity plus debt) to about 50%.

Liquidity Profile

PacifiCorp has good near-term liquidity, with $12 million in cash and two $600 million revolvers expiring in June 2017 and March 2018, of which about $784 million was available as of 31 March 2015. The company generates CFO pre-W/C at a run-rate of roughly $1.5 billion which will more than cover the $964 million of capital expenditures it estimates for 2015. PacifiCorp has approximately $570 million of variable rate tax-exempt bonds that it remarkets periodically. Material issues coming due over the next 12 months are $115 million of variable rate tax-exempt bonds due on 1 July 2015 and $45 million due on 1 January 2016. The company plans to issue $200-$300 million of debt this year.

PacifiCorp uses its credit facilities to backstop its commercial paper program and to support its variable rate tax-exempt bonds. These credit agreements do not require a MAC representation for borrowings, which we view positively. The sole financial covenant is a limitation on debt to 65% of total capitalization. As of 31 March 2015, PacifiCorp had ample headroom under that covenant with that ratio at 49% as defined in the agreement.

Rating Outlook

The stable outlook incorporates our expectation that PacifiCorp will continue to receive reasonable regulatory

treatment for the recovery of its capital expenditures, and that the funding requirements will be financed in a manner consistent with management's commitment to maintain a healthy financial profile. We anticipate that PacifiCorp's credit metrics will be sustained at about current levels, for example, CFO pre-W/C/Debt in the low 20% range.

What Could Change the Rating - Up

Although its flat financial outlook limits the prospects for a rating upgrade in the foreseeable future, the rating could be upgraded longer term if a more favorable regulatory environment and a conservatively financed capital expenditure program result in a sustained improvement in credit metrics. This would include, for example, PacifiCorp's ratios of CFO pre-W/C/Debt sustained in the mid 20% range.

What Could Change the Rating - Down

The ratings could be downgraded if PacifiCorp's capital expenditures are funded in a manner inconsistent with its current financial profile, or if adverse regulatory rulings lower its credit metrics, as demonstrated for example, by a ratio of CFO pre-W/C/Debt sustained below 20%.

Rating Factors

PacifiCorp

Regulated Electric and Gas Utilities Industry Grid [1][2]	**Current FY 12/31/2014**			[3]**Moody's 12-18 Month Forward ViewAs of 5/2015**	
Factor 1 : Regulatory Framework (25%)	**Measure**	**Score**		**Measure**	**Score**
a) Legislative and Judicial Underpinnings of the Regulatory Framework	A	A		A	A
b) Consistency and Predictability of Regulation	A	A		A	A
Factor 2 : Ability to Recover Costs and Earn Returns (25%)					
a) Timeliness of Recovery of Operating and Capital Costs	A	A		A	A
b) Sufficiency of Rates and Returns	Baa	Baa		Baa	Baa
Factor 3 : Diversification (10%)					
a) Market Position	A	A		A	A
b) Generation and Fuel Diversity	Baa	Baa		Baa	Baa
Factor 4 : Financial Strength (40%)					
a) CFO pre-WC + Interest / Interest (3 Year Avg)	5.0x	A		4.9x - 5x	A
b) CFO pre-WC / Debt (3 Year Avg)	21.6%	Baa		21% - 22%	A
c) CFO pre-WC - Dividends / Debt (3 Year Avg)	15.1%	Baa		10% - 15%	Baa
d) Debt / Capitalization (3 Year Avg)	37.5%	A		37% - 38%	A
Rating:					
Grid-Indicated Rating Before Notching Adjustment		A3			A3
HoldCo Structural Subordination Notching				0	0
a) Indicated Rating from Grid		A3			A3
b) Actual Rating Assigned					A3

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 12/31/2014; Source: Moody's Financial Metrics [3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

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Exhibit No. BNW-4
Docket UE-152253
Witness: Bruce N. Williams

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of PACIFIC POWER & LIGHT COMPANY, Petition For a Rate Increase Based on a Modified Commission Basis Report, Two-Year Rate Plan, and Decoupling Mechanism.	Docket UE-152253

PACIFIC POWER & LIGHT COMPANY

EXHIBIT OF BRUCE N. WILLIAMS

Standard & Poor's Ratings Direct (March 12, 2015)

January 2016

RatingsDirect®

Summary:
PacifiCorp

Primary Credit Analyst:
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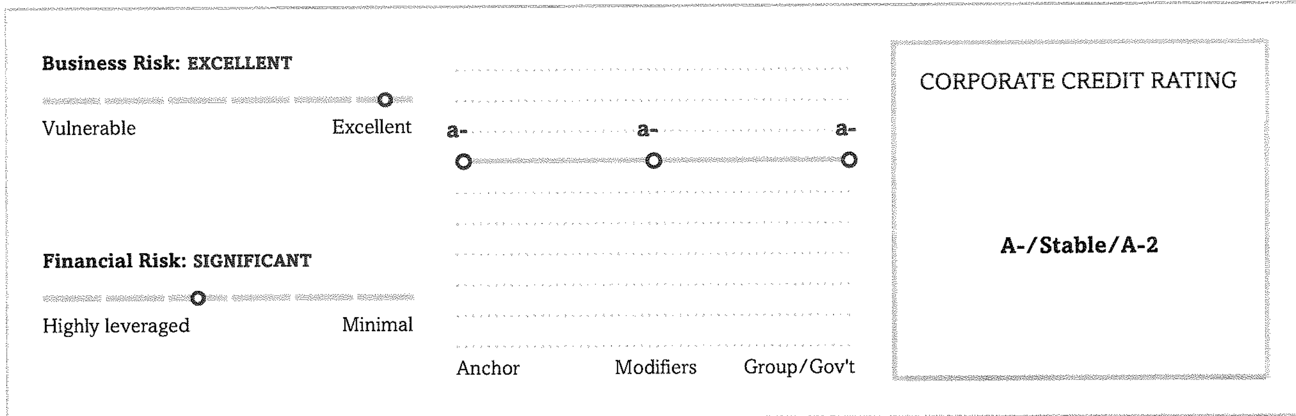
Summary:
PacifiCorp



Rationale

Business Risk: Excellent

- Stable operating cash flow from the regulated utility operations that supports the credit profile
- Lack of competition in regulated service territories
- About 70% of retail revenue derived from residential and commercial customers, which provides cash flow diversity and at least a base level of usage
- Prudent management of coal-fired generating units to comply with environmental requirements
- Cost recovery through base rates and rate surcharges for expenses such as fuel and capital investments

Financial Risk: Significant

- Discretionary cash flow to remain negative during heavy capital spending period
- EBITDA growth consisting of revenue increases and customer growth to remain approximately the same as that in recent years
- Ability to consistently access capital markets to fund capital investments
- Sizable parent-level debt

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Outlook

The stable rating outlook reflects our expectation that management will continue to focus on utility operations and reach constructive regulatory outcomes to avoid any meaningful increase in business risk. The outlook also reflects our projection that cash flow measures will decrease as construction projects move forward and bonus depreciation benefits drop. Our base-case forecast calls for adjusted funds from operations (FFO) to adjusted debt and adjusted operating cash flow to adjusted debt both averaging between 18% and 23%. These measures are consistent with our expectations for the rating.

Downside scenario

We could lower the rating if PacifiCorp's business risk increases materially through ongoing under-recovery of operating costs or capital improvements, or if financial measures consistently underperform our base-case forecast and remain at less credit-supportive levels, including adjusted FFO to total debt dropping below 13%.

Upside scenario

Although we do not expect an upgrade because of near-term capital needs, we could raise the ratings if we raised the ratings on parent MEHC and if PacifiCorp's credit quality strengthened through both reduced business risk and stronger financial measures that consistently exceeded our base-case forecast, including FFO to total debt greater than 23%.

Standard & Poor's Base-Case Scenario

Assumptions

- Low-single-digit EBITDA growth from retail sales growth and incremental cost recovery through various rate mechanisms, including base-rate increases and rate surcharges
- Capital spending of about $1.1 billion in 2015, $900 million in 2016, and $775 million in 2017
- Annual owner distributions of roughly $500 million in 2015, 2016, and 2017
- Capital spending and dividend payouts that result in discretionary cash flow that is positive once capital spending declines, indicating limited, if any, external funding needs

Key Metrics

	2014*	2015E	2016E
FFO/total debt (%)	21.4	18-20	19-21
Debt/EBITDA (x)	3.6	3.2-3.7	3-3.5
CFO/debt (%)	21.6	19-21	20-22

Note: Standard & Poor's adjusted figures. *Last 12 months ended Sept. 30, 2014. E--Estimate. CFO—Cash flow from operations.

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Business Risk: Excellent

We base our assessment of PacifiCorp's business risk profile as "excellent," as defined in our criteria, on the company's "strong" competitive profile, "very low" industry risk derived from the regulated utility industry, and the "very low" country risk of the U.S., where the utility operates.

PacifiCorp's competitive position reflects the stable regulatory framework of the low-risk regulated utility. We consider the utility's geographical, market, and regulatory diversity over its six-state service territory strengths because these factors provide extensive market diversity. About 70% of retail revenue is derived from residential and commercial customers, providing cash flow diversity and at least a base level of usage. PacifiCorp also has a high level of cash flow diversity since it serves a total of about 1.7 million retail customers, in Utah, Wyoming, and Idaho through its Rocky Mountain Power operating unit; and in Oregon, Washington, and California through its Pacific Power unit.

Utah and Oregon are the most important markets for the company, providing about 45% and 25% of annual retail sales, respectively. As the two largest markets for PacifiCorp, constructive regulatory dialogue is required to maintain timely recovery of fuel costs and capital investments, along with other costs. Rocky Mountain Power has had good sales growth, especially in Utah. Salt Lake County accounts for slightly more than 20% of PacifiCorp's customer base.

The utility has a well-diversified power supply portfolio that consists of coal (approximately 60%), gas (about 10%), purchased power (20%), and other sources (about 10%). We expect PacifiCorp's coal fleet to comply with existing environmental rules. However, regarding the proposed Clean Power Plan, we will monitor the utility's progress to comply with the rule, once final.

Financial Risk: Significant

Based on the medial volatility financial ratio benchmarks, our assessment of PacifiCorp's financial risk profile is "significant," reflecting the repetitive cash flows of a utility providing regulated electric service. Our assessment also takes into consideration the company's ongoing capital spending and mostly steady recovery of costs through various rate mechanisms. Capital spending and dividend payments will lead to a drop in discretionary cash flow over the forecast period, indicating the need for external funding and vigilant cost recovery to maintain cash flow measures. Although we expect equity to grow, we also expect the utility to continue using debt financing.

For the 12 months ended Sept. 30, 2014, FFO to debt and operating cash flow to debt were both about 21%. For the same period, debt to EBITDA was about 3.6x. Our baseline forecast includes financial measures about the same as to slightly better than existing levels for FFO to debt and operating cash flow to debt and slightly stronger forecast debt to EBITDA than current levels.

Liquidity: Adequate

PacifiCorp has "adequate" liquidity, as our criteria define the term. We believe the company's liquidity sources are likely to cover its uses by more than 1.1x over the next 12 months and to meet cash outflows even with a 10% decline

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in EBITDA.

Principal Liquidity Sources	Principal Liquidity Uses
• We estimate FFO of about $1.6 billion • Credit facility availability of approximately $1.2 billion	• Capital spending of roughly $1.1 billion • Debt maturities of about $120 million • Dividends of approximately $500 million

Other Credit Considerations

Other modifiers have no impact on the rating outcome.

Group Influence

Under our group rating methodology, we designate PacifiCorp as a core entity to BHE since it is unlikely to be sold in the near term; it operates in lines of business or functions integral to the overall group strategy; it has strong, long-term commitments of support from senior group management in good times and under stressful conditions; it constitutes a significant proportion of BHE's longstanding utility operations; it is closely linked to BHE's reputation because of its regulated nature; it has been operating many years; and it is likely to receive support from the group should it fall into financial difficulty. In addition, PacifiCorp's business is similar to those of BHE's principal utility operations, which will continue to be a large portion of the consolidated group.

In addition, BHE meets the provisions and conditions in our group rating methodology to be considered an insulated subsidiary, including the requirement that PacifiCorp's SACP exceed BHE's group credit profile (GCP). Insulation measures in place that inhibit the utility from fully supporting the parent and justify a one-notch rating differential between PacifiCorp and BHE include:

- PacifiCorp is prohibited from acquiring obligations or securities of BHE or affiliates,
- To pay dividends, PacifiCorp must maintain investment grade credit ratings,
- Separate books and records must be maintained,
- Affiliate transactions must be at arm's length,
- PacifiCorp has a regulatory commitment not to pay dividends if its common equity ratio drops below 46.25%, and
- To pay dividends, interest coverage should be at least 2.5x and debt leverage cannot exceed 65%.

Ratings Score Snapshot

Corporate Credit Rating

A-/Stable/A-2

Business risk: Excellent

- **Country risk:** Very low
- **Industry risk:** Very low

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- **Competitive position:** Strong

Financial risk: Significant

- **Cash flow/Leverage:** Significant

Anchor: a-

Modifiers

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Satisfactory (no impact)
- **Comparable rating analysis:** Neutral (no impact)

Stand-alone credit profile : a-

- **Group credit profile:** bbb+
- Entity status within group: Insulated (+1 notch above group credit profile)

Recovery Analysis

We assign recovery ratings to first mortgage bonds (FMBs) issued by U.S. utilities, which can result in issue ratings being notched above an ICR on a utility depending on the rating category and the extent of the collateral coverage. The FMBs issued by U.S. utilities are a form of "secured utility bond" (SUB) that qualifies for a recovery rating as defined in our criteria.

The recovery methodology is supported by the ample historical record of 100% recovery for secured bondholders in utility bankruptcies in the U.S. and our view that the factors that enhanced those recoveries will persist in the future (the limited size of the creditor class and the durable value of utility rate-based assets during and after a reorganization, given the essential service provided and the high replacement cost).

Under our SUB criteria, we calculate a ratio of our estimate of the value of the collateral pledged to bondholders relative to the amount of FMBs outstanding. FMB ratings can exceed an ICR on a utility by up to one notch in the 'A' category, two notches in the 'BBB' category, and three notches in speculative-grade categories depending on the calculated ratio.

PacifiCorp's FMBs benefit from a first-priority lien on substantially all of the utility's real property owned or subsequently acquired. Collateral coverage of more than 1.5x supports a recovery rating of '1+' and an issue rating one notch above the ICR.

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Related Criteria And Research

Related Criteria

- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria - Corporates - Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Methodology For Linking Short-Term And Long-Term Ratings For Corporate, Insurance, And Sovereign Issuers, May 7, 2013
- Collateral Coverage and Issue Notching Rules for '1+' and '1' Recovery Ratings on Senior Bonds Secured by Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- Criteria - Corporates - General: 2008 Corporate Criteria: Rating Each Issue, April 15, 2008

Business And Financial Risk Matrix

	Financial Risk Profile					
Business Risk Profile	Minimal	Modest	Intermediate	**Significant**	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	**a-**	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

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Exhibit No. BNW-5
Docket UE-152253
Witness: Bruce N. Williams

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of PACIFIC POWER & LIGHT COMPANY, Petition For a Rate Increase Based on a Modified Commission Basis Report, Two-Year Rate Plan, and Decoupling Mechanism.	Docket UE-152253

PACIFIC POWER & LIGHT COMPANY

EXHIBIT OF BRUCE N. WILLIAMS

Cost of Long-Term Debt

January 2016

PACIFICORP
Electric Operations
Pro-Forma Cost of Long-Term Debt Summary
June 30, 2016

LINE NO.	DESCRIPTION	AMOUNT CURRENTLY OUTSTANDING	ISSUANCE EXPENSES	REDEMPTION EXPENSES	NET PROCEEDS TO COMPANY	ANNUAL DEBT SERVICE COST	INTEREST RATE	ALL-IN COST	ORIG LIFE	YTM	LINE NO.
1											1
2	**Total First Mortgage Bonds**	**$6,703,999,000**	**($68,624,372)**	**($31,219,786)**	**$6,604,154,842**	**$364,525,507**	**5.296%**	**5.437%**	**22.0**	**13.8**	2
3											3
4	Subtotal - Pollution Control Revenue Bonds secured by FMBs	$202,250,000	($5,258,489)	($2,181,869)	$194,809,642	$2,955,789	1.309%	1.461%	30.0	8.1	4
5	Subtotal - Pollution Control Revenue Bonds	$198,725,000	($1,941,142)	($3,864,998)	$192,918,860	$2,580,816	1.179%	1.299%	29.4	2.8	5
6	**Total Pollution Control Revenue Bonds**	**$400,975,000**	**($7,199,631)**	**($6,046,867)**	**$387,728,502**	**$5,536,605**	**1.244%**	**1.381%**	**29.7**	**5.5**	6
7											7
8	Loss on Long Term Debt Reacquistions, without Refunding					$191,971					8
9	**Total Cost of Long Term Debt**	**$7,104,974,000**	**($75,824,003)**	**($37,266,653)**	**$6,991,883,344**	**$370,254,083**	**5.067%**	**5.211%**	**22.5**	**13.3**	9
10											10

PACIFICORP
Electric Operations
Pro-Forma Cost of Long-Term Debt Detail
June 30, 2016

LINE NO.	INTEREST RATE	DESCRIPTION	ISSUANCE DATE	MATURITY DATE	ORIG LIFE	YTM	PRINCIPAL AMOUNT ORIGINAL ISSUE	PRINCIPAL AMOUNT CURRENTLY OUTSTANDING	ISSUANCE EXPENSES	REDEMPTION EXPENSES	NET PROCEEDS TO COMPANY TOTAL DOLLAR AMOUNT	NET PROCEEDS TO COMPANY PER $100 PRINCIPAL AMOUNT	MONEY TO COMPANY	ANNUAL DEBT SERVICE COST	LINE NO.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	
1															1
2															2
3	8.635%	C-U Series due thru Oct 2016	04/15/92	10/01/16	24	0	$18,750,000	$1,686,000	$0	$0	$1,686,000	$100.000	8.634%	$145,569	3
4	8.470%	C-U Series due thru Oct 2017	04/15/92	10/01/17	25	1	$19,609,000	$3,313,000	$0	$0	$3,313,000	$100.000	8.469%	$280,578	4
5	**8.526%**	**Subtotal - Amortizing FMBs**			**25**	**1**		**$4,999,000**	**$0**	**$0**	**$4,999,000**		**8.525%**	**$426,147**	5
6															6
7	5.650%	Series due Jul 2018	07/17/08	07/15/18	10	2	$500,000,000	$500,000,000	($3,972,221)	$0	$496,027,779	$99.206	5.756%	$28,780,000	7
8	5.500%	Series due Jan 2019	01/08/09	01/15/19	10	3	$350,000,000	$350,000,000	($4,808,293)	$0	$345,191,707	$98.626	5.682%	$19,887,000	8
9	3.850%	Series due Jun 2021	05/12/11	06/15/21	10	5	$400,000,000	$400,000,000	($3,751,138)	$0	$396,248,862	$99.062	3.963%	$15,852,000	9
10	2.950%	Series due Feb 2022	01/06/12	02/01/22	10	6	$350,000,000	$350,000,000	($2,732,350)	$0	$347,267,650	$99.219	3.040%	$10,640,000	10
11	2.950%	Series due Feb 2022 (2)	03/06/12	02/01/22	10	6	$100,000,000	$100,000,000	($173,129)	($4,970,793)	$94,856,079	$94.856	3.571%	$3,571,000	11
12	2.950%	Series due Jun 2023	06/06/13	06/01/23	10	7	$300,000,000	$300,000,000	($2,759,352)	$0	$297,240,648	$99.080	3.058%	$9,174,000	12
13	3.600%	Series due Apr 2024	03/13/14	04/01/24	10	8	$425,000,000	$425,000,000	($3,600,164)	($1,943,075)	$419,456,761	$98.696	3.757%	$15,967,250	13
14	3.350%	Series due Jul 2025	06/19/15	07/01/25	10	9	$250,000,000	$250,000,000	($2,441,421)	$0	$247,558,579	$99.023	3.466%	$8,665,000	14
15	7.700%	Series due Nov 2031	11/21/01	11/15/31	30	15	$300,000,000	$300,000,000	($3,701,310)	$0	$296,298,690	$98.766	7.807%	$23,421,000	15
16	5.900%	Series due Aug 2034	08/24/04	08/15/34	30	18	$200,000,000	$200,000,000	($2,614,365)	$0	$197,385,635	$98.693	5.994%	$11,988,000	16
17	5.250%	Series due Jun 2035	06/08/05	06/15/35	30	19	$300,000,000	$300,000,000	($3,992,021)	($1,295,995)	$294,711,984	$98.237	5.369%	$16,107,000	17
18	6.100%	Series due Aug 2036	08/10/06	08/01/36	30	20	$350,000,000	$350,000,000	($4,048,881)	$0	$345,951,119	$98.843	6.185%	$21,647,500	18
19	5.750%	Series due Apr 2037	03/14/07	04/01/37	30	21	$600,000,000	$600,000,000	($613,216)	$0	$599,386,784	$99.898	5.757%	$34,542,000	19
20	6.250%	Series due Oct 2037	10/03/07	10/15/37	30	21	$600,000,000	$600,000,000	($5,877,281)	$0	$594,122,719	$99.020	6.323%	$37,938,000	20
21	6.350%	Series due Jul 2038	07/17/08	07/15/38	30	22	$300,000,000	$300,000,000	($3,961,333)	$0	$296,038,667	$98.680	6.450%	$19,350,000	21
22	6.000%	Series due Jan 2039	01/08/09	01/15/39	30	23	$650,000,000	$650,000,000	($12,309,687)	$0	$637,690,313	$98.106	6.139%	$39,903,500	22
23	4.100%	Series due Feb 2042	01/06/12	02/01/42	30	26	$300,000,000	$300,000,000	($3,724,911)	$0	$296,275,089	$98.758	4.173%	$12,519,000	23
24	**5.148%**	**Subtotal - Bullet FMBs**			**21**	**14**		**$6,275,000,000**	**($65,081,071)**	**($8,209,863)**	**$6,201,709,066**		**5.258%**	**$329,952,250**	24
25															25
26	8.530%	Series C due Dec 2021	12/16/91	12/16/21	30	5	$15,000,000	$15,000,000	($115,202)	($2,053,922)	$12,830,877	$85.539	10.066%	$1,509,900	26
27	8.375%	Series C due Dec 2021	12/31/91	12/31/21	30	6	$5,000,000	$5,000,000	($38,400)	($684,641)	$4,276,959	$85.539	9.889%	$494,450	27
28	8.260%	Series C due Jan 2022	01/08/92	01/07/22	30	6	$5,000,000	$5,000,000	($33,243)	($684,641)	$4,282,117	$85.642	9.745%	$487,250	28
29	8.270%	Series C due Jan 2022	01/09/92	01/10/22	30	6	$4,000,000	$4,000,000	($30,594)	($547,712)	$3,421,693	$85.542	9.768%	$390,720	29
30	**8.421%**	**Subtotal - Series C MTNs**			**30**	**5**		**$29,000,000**	**($217,439)**	**($3,970,915)**	**$24,811,646**		**9.939%**	**$2,882,320**	30
31															31
32	8.050%	Series E due Sep 2022	09/18/92	09/01/22	30	6	$15,000,000	$15,000,000	($131,471)	($1,695,566)	$13,172,963	$87.820	9.257%	$1,388,550	32
33	8.070%	Series E due Sep 2022	09/09/92	09/09/22	30	6	$8,000,000	$8,000,000	($70,118)	($904,302)	$7,025,580	$87.820	9.280%	$742,400	33
34	8.110%	Series E due Sep 2022	09/11/92	09/09/22	30	6	$12,000,000	$12,000,000	($105,177)	($1,356,453)	$10,538,370	$87.820	9.325%	$1,119,000	34
35	8.120%	Series E due Sep 2022	09/11/92	09/09/22	30	6	$50,000,000	$50,000,000	($438,238)	($5,651,887)	$43,909,875	$87.820	9.336%	$4,668,000	35
36	8.050%	Series E due Sep 2022	09/14/92	09/14/22	30	6	$10,000,000	$10,000,000	($87,648)	($1,130,377)	$8,781,975	$87.820	9.258%	$925,800	36
37	8.080%	Series E due Oct 2022	10/15/92	10/14/22	30	6	$25,000,000	$25,000,000	($200,190)	($2,061,627)	$22,738,182	$90.953	8.953%	$2,238,250	37
38	8.080%	Series E due Oct 2022	10/15/92	10/14/22	30	6	$26,000,000	$26,000,000	($208,198)	($2,938,981)	$22,852,821	$87.895	9.283%	$2,413,580	38
39	8.230%	Series E due Jan 2023	01/29/93	01/20/23	30	7	$4,000,000	$4,000,000	$51,229	($88,989)	$3,962,241	$99.056	8.316%	$332,640	39
40	8.230%	Series E due Jan 2023	01/20/93	01/20/23	30	7	$5,000,000	$5,000,000	($37,914)	($335,843)	$4,626,243	$92.525	8.951%	$447,550	40
41	**8.099%**	**Subtotal - Series E MTNs**			**30**	**6**		**$155,000,000**	**($1,227,725)**	**($16,164,025)**	**$137,608,250**		**9.210%**	**$14,275,770**	41
42															42
43	7.260%	Series F due Jul 2023	07/22/93	07/21/23	30	7	$11,000,000	$11,000,000	($100,622)	($589,062)	$10,310,316	$93.730	7.804%	$858,440	43
44	7.260%	Series F due Jul 2023	07/22/93	07/21/23	30	7	$27,000,000	$27,000,000	($246,981)	($1,445,880)	$25,307,139	$93.730	7.804%	$2,107,080	44
45	7.230%	Series F due Aug 2023	08/16/93	08/16/23	30	7	$15,000,000	$15,000,000	($137,211)	($268,624)	$14,594,165	$97.294	7.457%	$1,118,550	45
46	7.240%	Series F due Aug 2023	08/16/93	08/16/23	30	7	$30,000,000	$30,000,000	($274,423)	($537,248)	$29,188,329	$97.294	7.467%	$2,240,100	46
47	6.750%	Series F due Sep 2023	09/14/93	09/14/23	30	7	$2,000,000	$2,000,000	($15,300)	$0	$1,984,700	$99.235	6.810%	$136,200	47
48	6.720%	Series F due Sep 2023	09/14/93	09/14/23	30	7	$2,000,000	$2,000,000	($15,300)	$0	$1,984,700	$99.235	6.780%	$135,600	48
49	6.750%	Series F due Sep 2023	09/14/93	09/14/23	30	7	$5,000,000	$5,000,000	($38,250)	($34,169)	$4,927,581	$98.552	6.865%	$343,250	49
50	6.750%	Series F due Oct 2023	10/26/93	10/26/23	30	7	$12,000,000	$12,000,000	($91,396)	$0	$11,908,604	$99.238	6.810%	$817,200	50
51	6.750%	Series F due Oct 2023	10/26/93	10/26/23	30	7	$16,000,000	$16,000,000	($121,861)	$0	$15,878,139	$99.238	6.810%	$1,089,600	51
52	6.750%	Series F due Oct 2023	10/26/93	10/26/23	30	7	$20,000,000	$20,000,000	($152,326)	$0	$19,847,674	$99.238	6.810%	$1,362,000	52
53	**7.044%**	**Subtotal - Series F MTNs**			**30**	**7**		**$140,000,000**	**($1,193,670)**	**($2,874,983)**	**$135,931,347**		**7.291%**	**$10,208,020**	53

PACIFICORP
Electric Operations
Pro-Forma Cost of Long-Term Debt Detail
June 30, 2016

LINE NO.	INTEREST RATE	DESCRIPTION	ISSUANCE DATE	MATURITY DATE	ORIG LIFE	YTM	PRINCIPAL AMOUNT ORIGINAL ISSUE	PRINCIPAL AMOUNT CURRENTLY OUTSTANDING	ISSUANCE EXPENSES	REDEMPTION EXPENSES	NET PROCEEDS TO COMPANY TOTAL DOLLAR AMOUNT	NET PROCEEDS TO COMPANY PER $100 PRINCIPAL AMOUNT	MONEY TO COMPANY	ANNUAL DEBT SERVICE COST	LINE NO.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	
54															54
55	6.710%	Series G due Jan 2026	01/23/96	01/15/26	30	10	$100,000,000	$100,000,000	($904,467)	$0	$99,095,533	$99.096	6.781%	$6,781,000	55
56	**6.710%**	**Subtotal - Series G MTNs**			**30**	**10**		**$100,000,000**	**($904,467)**	**$0**	**$99,095,533**		**6.781%**	**$6,781,000**	56
57															57
58	**5.296%**	**Total First Mortgage Bonds**			**22**	**14**		**$6,703,999,000**	**($68,624,372)**	**($31,219,786)**	**$6,604,154,842**		**5.437%**	**$364,525,507**	58
59															59
60															60
61	1.001%	Forsyth 86 due Dec 2016	12/29/86	12/01/16	30	0	$8,500,000	$8,500,000	($304,824)	$0	$8,195,176	$96.414	1.143%	$97,155	61
62	0.955%	Converse 94 due Nov 2024	11/17/94	11/01/24	30	8	$8,190,000	$8,190,000	($209,778)	($86,323)	$7,893,899	$96.385	1.096%	$89,762	62
63	1.418%	Emery 94 due Nov 2024	11/17/94	11/01/24	30	8	$121,940,000	$121,940,000	($3,274,246)	($1,925,767)	$116,739,987	$95.736	1.597%	$1,947,382	63
64	1.060%	Lincoln 94 due Nov 2024	11/17/94	11/01/24	30	8	$15,060,000	$15,060,000	($422,858)	($81,427)	$14,555,715	$96.651	1.193%	$179,666	64
65	1.539%	Sweetwater 94 due Nov 2024	11/17/94	11/01/24	30	8	$21,260,000	$21,260,000	($510,479)	($88,352)	$20,661,169	$97.183	1.658%	$352,491	65
66	0.905%	Converse 95 due Nov 2025	11/17/95	11/01/25	30	9	$5,300,000	$5,300,000	($132,043)	$0	$5,167,957	$97.509	1.001%	$53,053	66
67	1.003%	Lincoln 95 due Nov 2025	11/17/95	11/01/25	30	9	$22,000,000	$22,000,000	($404,262)	$0	$21,595,738	$98.162	1.074%	$236,280	67
68	**1.309%**	**Subtotal - Secured PCRBs**			**30**	**8**		**$202,250,000**	**($5,258,489)**	**($2,181,869)**	**$194,809,642**		**1.461%**	**$2,955,789**	68
69															69
70	0.899%	Sweetwater 88A due Jan 2017	01/14/88	01/01/17	29	1	$50,000,000	$50,000,000	($422,443)	($882,101)	$48,695,456	$97.391	1.003%	$501,500.000	70
71	1.477%	Forsyth 88 due Jan 2018	01/14/88	01/01/18	30	2	$45,000,000	$45,000,000	($380,198)	($1,013,283)	$43,606,519	$96.903	1.607%	$723,150.000	71
72	0.887%	Gillette 88 due Jan 2018	01/14/88	01/01/18	30	2	$63,000,000	$41,200,000	($351,905)	($1,006,013)	$39,842,082	$96.704	1.015%	$418,180.000	72
73	1.349%	Converse 92 due Dec 2020	09/29/92	12/01/20	28	4	$22,485,000	$22,485,000	($242,164)	($303,303)	$21,939,533	$97.574	1.454%	$326,931.900	73
74	1.385%	Sweetwater 92A due Dec 2020	09/29/92	12/01/20	28	4	$9,335,000	$9,335,000	($167,524)	($134,094)	$9,033,382	$96.769	1.526%	$142,452.100	74
75	1.403%	Sweetwater 92B due Dec 2020	09/29/92	12/01/20	28	4	$6,305,000	$6,305,000	($151,908)	($97,735)	$6,055,357	$96.041	1.577%	$99,429.850	75
76	1.401%	Sweetwater 95 due Nov 2025	12/14/95	11/01/25	30	9	$24,400,000	$24,400,000	($225,000)	($428,469)	$23,746,531	$97.322	1.513%	$369,172.000	76
77	**1.179%**	**Subtotal - Unsecured PCRBs**			**29**	**3**		**$198,725,000**	**($1,941,142)**	**($3,864,998)**	**$192,918,860**		**1.299%**	**$2,580,816**	77
78															78
79	**1.244%**	**Total PCRB Obligations**			**30**	**5**		**$400,975,000**	**($7,199,631)**	**($6,046,867)**	**$387,728,502**		**1.381%**	**$5,536,605**	79
80															80
81			**REACQ**	**ORG MAT**											81
82			**DATE**	**DATE**											82
83		8.375% Series A QUIDS	11/17/00	06/30/35										$107,887	83
84		8.55% Series B QUIDS	11/17/00	12/31/25										$84,084	84
85		**Long-Term Debt Reacquisition, without refunding amortization**												**$191,971**	85
86															86
87	**5.067%**	**Total Long-Term Debt**			**22**	**13**		**$7,104,974,000**	**($75,824,003)**	**($37,266,653)**	**$6,991,883,344**		**5.211%**	**$370,254,083**	87
88															88

Exhibit No. BNW-6
Docket UE-152253
Witness: Bruce N. Williams

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of PACIFIC POWER & LIGHT COMPANY, Petition For a Rate Increase Based on a Modified Commission Basis Report, Two-Year Rate Plan, and Decoupling Mechanism.	Docket UE-152253

PACIFIC POWER & LIGHT COMPANY

EXHIBIT OF BRUCE N. WILLIAMS

Variable Rate PCRBs

January 2016

Indicative Forward PCRB Variable Rates
Pro-Forma for June 30, 2016

	30 Day LIBOR Daily Ave	Floating Rate PCRBs Daily Ave	PCRB / LIBOR
	(a)	(b)	(b)/(a)
Jan-00	5.81%	3.33%	57%
Feb-00	5.89%	3.62%	62%
Mar-00	6.05%	3.68%	61%
Apr-00	6.16%	4.02%	65%
May-00	6.54%	4.89%	75%
Jun-00	6.65%	4.35%	65%
Jul-00	6.63%	3.99%	60%
Aug-00	6.62%	4.09%	62%
Sep-00	6.62%	4.50%	68%
Oct-00	6.62%	4.36%	66%
Nov-00	6.63%	4.33%	65%
Dec-00	6.68%	4.14%	62%
Jan-01	5.88%	3.10%	53%
Feb-01	5.53%	3.59%	65%
Mar-01	5.13%	3.18%	62%
Apr-01	4.82%	3.72%	77%
May-01	4.16%	3.38%	81%
Jun-01	3.92%	3.03%	77%
Jul-01	3.82%	2.65%	69%
Aug-01	3.64%	2.36%	65%
Sep-01	3.17%	2.42%	76%
Oct-01	2.48%	2.18%	88%
Nov-01	2.13%	1.79%	84%
Dec-01	1.96%	1.64%	84%
Jan-02	1.81%	1.49%	82%
Feb-02	1.85%	1.39%	75%
Mar-02	1.89%	1.46%	77%
Apr-02	1.86%	1.58%	85%
May-02	1.84%	1.67%	91%
Jun-02	1.84%	1.58%	86%
Jul-02	1.83%	1.49%	81%
Aug-02	1.80%	1.49%	83%
Sep-02	1.82%	1.69%	93%
Oct-02	1.81%	1.84%	102%
Nov-02	1.44%	1.66%	115%
Dec-02	1.42%	1.57%	110%
Jan-03	1.36%	1.40%	103%
Feb-03	1.34%	1.43%	107%
Mar-03	1.31%	1.45%	111%
Apr-03	1.31%	1.52%	115%
May-03	1.31%	1.56%	119%
Jun-03	1.16%	1.38%	119%
Jul-03	1.11%	1.12%	102%
Aug-03	1.11%	1.16%	104%
Sep-03	1.12%	1.24%	111%
Oct-03	1.12%	1.24%	111%
Nov-03	1.13%	1.36%	121%
Dec-03	1.15%	1.32%	114%
Jan-04	1.11%	1.21%	110%
Feb-04	1.10%	1.17%	107%
Mar-04	1.09%	1.20%	110%
Apr-04	1.10%	1.27%	115%
May-04	1.10%	1.29%	117%
Jun-04	1.25%	1.28%	102%
Jul-04	1.41%	1.26%	89%
Aug-04	1.60%	1.40%	88%
Sep-04	1.78%	1.49%	83%
Oct-04	1.90%	1.72%	91%
Nov-04	2.19%	1.65%	75%
Dec-04	2.39%	1.67%	70%
Jan-05	2.49%	1.78%	72%
Feb-05	2.61%	1.88%	72%
Mar-05	2.81%	1.95%	69%
Apr-05	2.97%	2.50%	84%
May-05	3.09%	2.93%	95%
Jun-05	3.25%	2.39%	74%
Jul-05	3.43%	2.28%	67%
Aug-05	3.69%	2.44%	66%
Sep-05	3.78%	2.55%	68%
Oct-05	3.99%	2.66%	67%

Indicative Forward PCRB Variable Rates
Pro-Forma for June 30, 2016

	30 Day LIBOR Daily Ave	Floating Rate PCRBs Daily Ave	PCRB / LIBOR
	(a)	(b)	(b)/(a)
Nov-05	4.15%	2.93%	71%
Dec-05	4.36%	3.10%	71%
Jan-06	4.48%	3.02%	67%
Feb-06	4.58%	3.13%	68%
Mar-06	4.76%	3.11%	65%
Apr-06	4.92%	3.45%	70%
May-06	5.08%	3.52%	69%
Jun-06	5.24%	3.74%	71%
Jul-06	5.37%	3.60%	67%
Aug-06	5.35%	3.53%	66%
Sep-06	5.33%	3.61%	68%
Oct-06	5.32%	3.57%	67%
Nov-06	5.32%	3.62%	68%
Dec-06	5.35%	3.70%	69%
Jan-07	5.32%	3.64%	68%
Feb-07	5.32%	3.63%	68%
Mar-07	5.32%	3.64%	68%
Apr-07	5.32%	3.79%	71%
May-07	5.32%	3.90%	73%
Jun-07	5.32%	3.76%	71%
Jul-07	5.32%	3.66%	69%
Aug-07	5.52%	3.76%	68%
Sep-07	5.48%	3.84%	70%
Oct-07	4.98%	3.56%	72%
Nov-07	4.75%	3.53%	74%
Dec-07	5.00%	3.25%	65%
Jan-08	3.95%	3.02%	76%
Feb-08	3.14%	2.86%	91%
Mar-08	2.80%	3.79%	135%
Apr-08	2.79%	2.23%	80%
May-08	2.63%	1.93%	73%
Jun-08	2.47%	2.77%	112%
Jul-08	2.46%	4.12%	168%
Aug-08	2.47%	3.03%	123%
Sep-08	2.94%	4.57%	155%
Oct-08	3.87%	4.89%	126%
Nov-08	1.68%	2.34%	139%
Dec-08	1.01%	1.02%	101%
Jan-09	0.39%	0.70%	181%
Feb-09	0.46%	0.68%	147%
Mar-09	0.53%	0.66%	124%
Apr-09	0.45%	0.63%	140%
May-09	0.35%	0.53%	153%
Jun-09	0.32%	0.45%	143%
Jul-09	0.29%	0.41%	142%
Aug-09	0.27%	0.43%	158%
Sep-09	0.25%	0.40%	161%
Oct-09	0.24%	0.39%	159%
Nov-09	0.24%	0.37%	157%
Dec-09	0.23%	0.38%	165%
Jan-10	0.23%	0.32%	138%
Feb-10	0.23%	0.32%	137%
Mar-10	0.24%	0.32%	135%
Apr-10	0.26%	0.35%	134%
May-10	0.33%	0.34%	101%
Jun-10	0.35%	0.33%	93%
Jul-10	0.33%	0.30%	90%
Aug-10	0.27%	0.31%	115%
Sep-10	0.26%	0.31%	119%
Oct-10	0.26%	0.27%	106%
Nov-10	0.25%	0.27%	107%
Dec-10	0.26%	0.29%	110%
Jan-11	0.26%	0.26%	100%
Feb-11	0.26%	0.26%	98%
Mar-11	0.25%	0.24%	96%
Apr-11	0.22%	0.24%	106%
May-11	0.20%	0.20%	100%
Jun-11	0.19%	0.12%	62%
Jul-11	0.19%	0.07%	38%
Aug-11	0.21%	0.18%	83%

Indicative Forward PCRB Variable Rates
Pro-Forma for June 30, 2016

	30 Day LIBOR Daily Ave	Floating Rate PCRBs Daily Ave	PCRB / LIBOR
	(a)	(b)	(b)/(a)
Sep-11	0.23%	0.18%	78%
Oct-11	0.24%	0.17%	69%
Nov-11	0.25%	0.18%	70%
Dec-11	0.28%	0.18%	62%
Jan-12	0.28%	0.18%	64%
Feb-12	0.25%	0.22%	86%
Mar-12	0.24%	0.20%	84%
Apr-12	0.24%	0.25%	104%
May-12	0.24%	0.22%	90%
Jun-12	0.24%	0.19%	78%
Jul-12	0.25%	0.17%	68%
Aug-12	0.24%	0.16%	68%
Sep-12	0.22%	0.18%	81%
Oct-12	0.21%	0.20%	93%
Nov-12	0.21%	0.20%	95%
Dec-12	0.21%	0.15%	71%
Jan-13	0.21%	0.10%	51%
Feb-13	0.20%	0.13%	63%
Mar-13	0.20%	0.13%	66%
Apr-13	0.20%	0.18%	92%
May-13	0.20%	0.18%	90%
Jun-13	0.19%	0.11%	57%
Jul-13	0.19%	0.08%	43%
Aug-13	0.18%	0.09%	47%
Sep-13	0.18%	0.09%	49%
Oct-13	0.17%	0.10%	61%
Nov-13	0.17%	0.13%	78%
Dec-13	0.17%	0.14%	82%
Jan-14	0.16%	0.12%	74%
Feb-14	0.16%	0.11%	74%
Mar-14	0.15%	0.11%	73%
Apr-14	0.15%	0.13%	87%
May-14	0.15%	0.12%	80%
Jun-14	0.15%	0.10%	67%
Jul-14	0.15%	0.09%	61%
Aug-14	0.16%	0.09%	61%
Sep-14	0.15%	0.09%	55%
Oct-14	0.15%	0.08%	55%
Nov-14	0.15%	0.09%	59%
Dec-14	0.16%	0.08%	50%
Jan-15	0.17%	0.06%	38%
Feb-15	0.17%	0.06%	36%
Mar-15	0.18%	0.06%	35%
Apr-15	0.18%	0.09%	50%
May-15	0.18%	0.15%	79%
Jun-15	0.19%	0.13%	69%
Jul-15	0.19%	0.10%	55%
Aug-15	0.20%	0.09%	46%
Sep-15	0.20%	0.09%	47%
Oct-15	0.19%	0.10%	50%
Nov-15	0.21%	0.09%	45%
Average			86%

	Forward 30 Day LIBOR*	Historical Floating Rate PCRB / 30 Day LIBOR	Forecast Floating Rate PCRB
	(1)	(2)	(1) * (2)
6/30/2016	0.65%	86%	0.562%

* Source: Bloomberg L.P. (12/28/15)