

**BEFORE THE WASHINGTON  
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PACIFIC POWER & LIGHT  
COMPANY,**

**Respondent.**

**DOCKETS UE-140762 and UE-140617  
(consolidated)**

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**In the Matter of the Petition of**

**PACIFIC POWER & LIGHT  
COMPANY,**

**For an Order Approving Deferral of  
Costs Related to Colstrip Outage.**

**DOCKET UE-131384 (consolidated)**

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**In the Matter of the Petition of**

**PACIFIC POWER & LIGHT  
COMPANY,**

**For an Order Approving Deferral of  
Costs Related to Declining Hydro  
Generation.**

**DOCKET UE-140094 (consolidated)**

**PACIFIC POWER & LIGHT COMPANY**

**REDACTED REBUTTAL TESTIMONY OF CINDY A. CRANE**

**November 2014**

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1 **Q. Please state your name, business address, and present position with Pacific**  
2 **Power & Light Company (Pacific Power or Company), a division of PacifiCorp.**

3 A. My name is Cindy A. Crane. My business address is 201 South Main Street, Suite  
4 2300, Salt Lake City, Utah 84111. My position is President and Chief Executive  
5 Officer (CEO), Rocky Mountain Power.

6 **Q. Did you previously submit direct testimony in this case on behalf of Pacific**  
7 **Power?**

8 A. No. The Company's direct testimony on its pro forma coal expense was included in  
9 the testimony of Mr. Gregory N. Duvall. I will be the Company's witness on coal  
10 expense in this case, and I am adopting that portion of Mr. Duvall's direct testimony.

#### 11 **QUALIFICATIONS**

12 **Q. Briefly describe your professional experience.**

13 A. I joined PacifiCorp in 1990 and have held positions of increasing responsibility,  
14 including Director of Business Systems Integration, Managing Director of Business  
15 Planning and Strategic Analysis, and Vice President of Strategy and Division  
16 Services. My responsibilities included the management and development of  
17 PacifiCorp's ten-year business plan, assessing individual business strategies for  
18 PacifiCorp Energy, managing the construction of the Company's Wyoming wind  
19 plants, and assessing the feasibility of a nuclear power plant. In March 2009, I was  
20 appointed to Vice President of Interwest Mining Company and Fuel Resources. In  
21 this position, I was responsible for the operations of Energy West Mining Company  
22 and Bridger Coal Company, as well as overall coal supply acquisition and fuel

1 management for PacifiCorp's coal-fired generating plants. On November 1, 2014, I  
2 was appointed President and CEO, Rocky Mountain Power.

3 **PURPOSE AND SUMMARY**

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

5 A. My rebuttal testimony describes the pro forma coal expense changes in the  
6 Company's rebuttal net power costs (NPC). The changes in coal expense described  
7 in this testimony reflect updated fuel prices and volumes associated with the coal  
8 supplied by the Black Butte mine (Black Butte) and the Bridger Coal Company  
9 (BCC) to fuel the Jim Bridger coal-fired generating plant (Bridger plant). My  
10 testimony also provides updated coal supply prices for the Colstrip coal-fired  
11 generating plant (Colstrip plant).

12 **Q. Please summarize your testimony regarding changes to pro forma coal expense?**

13 A. Pro forma coal expense in the Company's rebuttal NPC increased by approximately  
14 \$25.0 million on a west control area basis; \$24.4 million is associated with higher  
15 coal prices and \$0.6 million is associated with increased volumes. Approximately  
16 ■■■ million of the price-related increase is related to the Bridger plant and results  
17 from updated contract prices and volumes for Black Butte coal and reduced volumes  
18 from BCC, resulting in higher BCC costs per ton. The remaining ■■■ million  
19 increase relates to updated coal prices at the Colstrip plant. The rebuttal testimony  
20 and exhibits of Ms. Natasha C. Siores address the Washington allocation of these  
21 increases.

22 My testimony describes: (1) the terms of the new coal and rail arrangements  
23 for Black Butte coal; (2) changes to BCC's underground mine plan; (3) the

1           reasonableness of the BCC coal costs; and (4) changes in coal prices for the Colstrip  
2           plant.

3                           **CHANGES TO BRIDGER PLANT COAL EXPENSE**

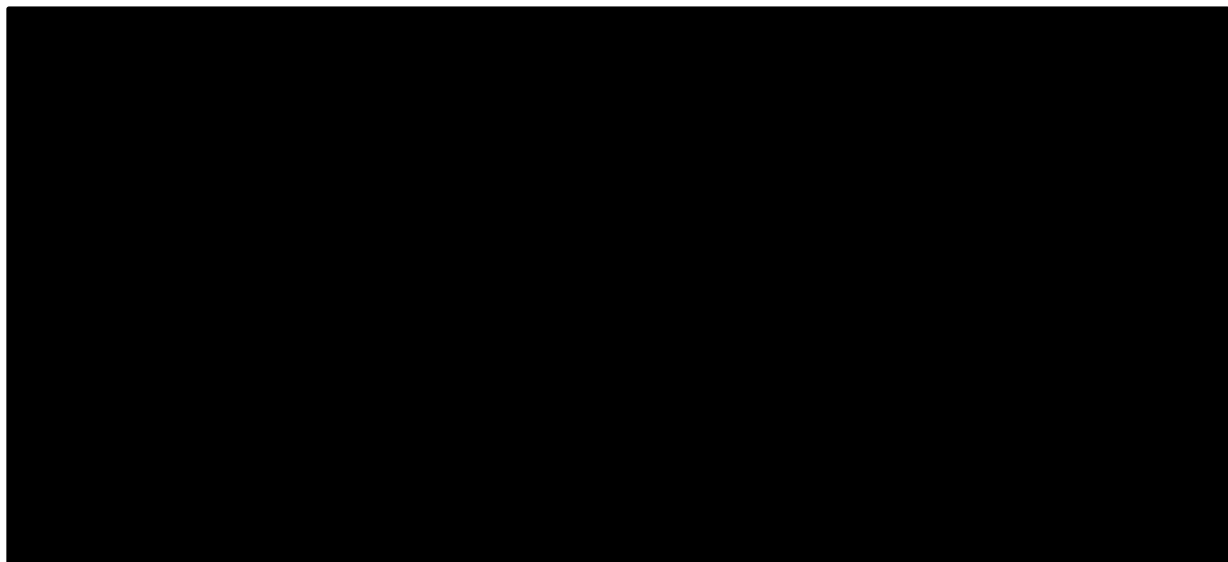
4   **Bridger Plant Cost Summary**

5   **Q.    How does the Company fuel the Bridger plant?**

6   A.    The Bridger plant is fueled by coal supplied by Black Butte and BCC. BCC is a joint  
7        venture that mines coal at the Bridger coal mine for delivery to the adjacent Bridger  
8        plant. PacifiCorp (through its wholly-owned subsidiary Pacific Minerals, Inc.) owns  
9        a two-thirds interest in BCC, and Idaho Power Company (through its wholly-owned  
10       subsidiary Idaho Energy Resources Co.) owns a one-third interest. PacifiCorp and  
11       Idaho Power Company have the same ownership percentages in the Bridger plant.  
12       BCC began supplying coal to the Bridger plant in 1974.

13   **Q.    Please summarize the █████ million increase in pro forma coal prices associated**  
14       **with the Bridger plant coal supplies.**

15   A.    Confidential Table 1 provides a summary of the price changes that are described in  
16        more detail below.



1 As reflected in this table, the costs associated with both BCC and Black Butte coal  
2 increased, reflecting updated contract prices for Black Butte and an updated mine  
3 plan for BCC. Although costs from both mines increased by different amounts, the  
4 BCC and Black Butte coal remain comparably priced. While Black Butte was  
5 slightly higher priced in the direct filing, BCC is now slightly higher than Black  
6 Butte. This is consistent with the historical BCC and Black Butte costs. In some  
7 years, BCC's production costs are lower than the third-party supply from Black Butte,  
8 and in other years, BCC's production costs are higher. On balance and over the long  
9 term, PacifiCorp's diversified approach has produced a reasonably priced, stable coal  
10 supply to the Bridger plant.

11 **Black Butte Price and Volume Changes**

12 **Q. Please describe the increased Black Butte coal prices.**

13 A. The increase in the delivered price of Black Butte is a result of a request for proposals  
14 (RFP) for Wyoming coal conducted by the Bridger plant owners in June 2014. As  
15 discussed in the direct testimony of Mr. Duvall, the current Black Butte coal supply  
16 agreement terminates during the first quarter of 2015. In direct testimony, the  
17 Company assumed that Black Butte coal would be supplied at the Black Butte  
18 contract deferral price.<sup>1</sup> The price reflected in the Company's pro forma rebuttal  
19 NPC is based on the results of the recently conducted RFP.

20 **Q. What was the result of the June 2014 RFP?**

21 A. The Bridger plant owners engaged both Ambre Energy, the operator of the Black  
22 Butte mine, and the Union Pacific Railroad in contract negotiations. The terms of the

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<sup>1</sup> Direct Testimony of Gregory N. Duvall, Exhibit No. GND-1CT at 19-20.

1 new coal supply arrangement for the Bridger plant reflect a fixed free-on-board  
2 (FOB) price of [REDACTED] per ton for Black Butte coal through 2017 for approximately  
3 [REDACTED] tons annually, a [REDACTED] per ton increase. The Jim Bridger plant owners also  
4 negotiated new rail rates with the Union Pacific railroad through 2017. Including the  
5 new rail rates, the delivered price of Black Butte coal during the pro forma period has  
6 increased from [REDACTED] per ton to [REDACTED] per ton, an increase of [REDACTED] per ton.

7 **Q. Please describe the updated volumes that will be delivered to the Bridger plant**  
8 **from Black Butte.**

9 A. The total Black Butte volumes increased from [REDACTED] tons to [REDACTED] tons. In  
10 direct testimony, Black Butte provided [REDACTED] percent of the Bridger plant's coal needs;  
11 in rebuttal, Black Butte provides [REDACTED] percent.<sup>2</sup>

12 **Q. How do the updated Black Butte coal prices and volumes increase the Bridger**  
13 **plant's fuel expense?**

14 A. Approximately [REDACTED] million of the increase in pro forma coal expense is associated  
15 with higher Black Butte and Union Pacific transportation costs and additional Black  
16 Butte volumes.

### 17 **BCC Price and Volume Update**

18 **Q. Please describe the increased BCC prices.**

19 A. The increase in BCC prices reflects the Company's updated mine plan, which was  
20 prepared in July 2014. Under the new mine plan, BCC's volumes decrease.

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<sup>2</sup> This volume of Black Butte coal is consistent with levels in the Company's 2013 general rate case, Docket UE-130043. See Rebuttal Testimony of Cindy A. Crane, Exhibit No. CAC-1T at 7, Docket UE-130043.

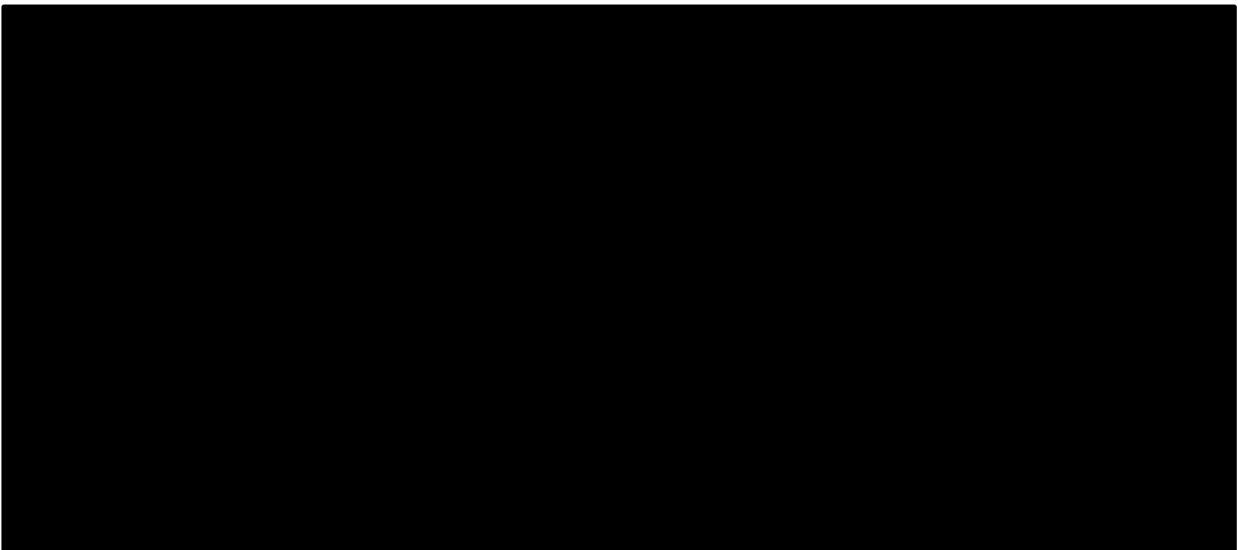
1           Approximately [REDACTED] million of the rebuttal pro forma coal expense is associated  
2           with BCC coal.

3   **Q.   How much of the BCC increase is related to reduced volumes?**

4   A.   Reduced coal production at BCC is the primary driver of the [REDACTED] per ton increase  
5       in average price from [REDACTED] per ton to [REDACTED] per ton. Decreased coal deliveries  
6       account for about [REDACTED] of the [REDACTED] per ton increase, or approximately 70 percent.  
7       Reduced surface coal deliveries account for approximately [REDACTED] of the [REDACTED] per  
8       ton increase in BCC surface costs; approximately [REDACTED] of the [REDACTED] per ton increase  
9       in BCC underground costs is associated with reduced production. A discussion of the  
10      major changes in BCC's underground mine plan is presented later in my testimony.

11   **Q.   How have the delivered volumes from BCC changed in the Company's rebuttal  
12      filing?**

13   A.   The Company's rebuttal position reflects a reduction in BCC coal deliveries from  
14      [REDACTED] tons to [REDACTED] tons, meaning that BCC is now expected to supply  
15      [REDACTED] percent of the Bridger plant's coal, down from [REDACTED] percent in the direct testimony.  
16      Confidential Table 2 below summarizes these volume changes.

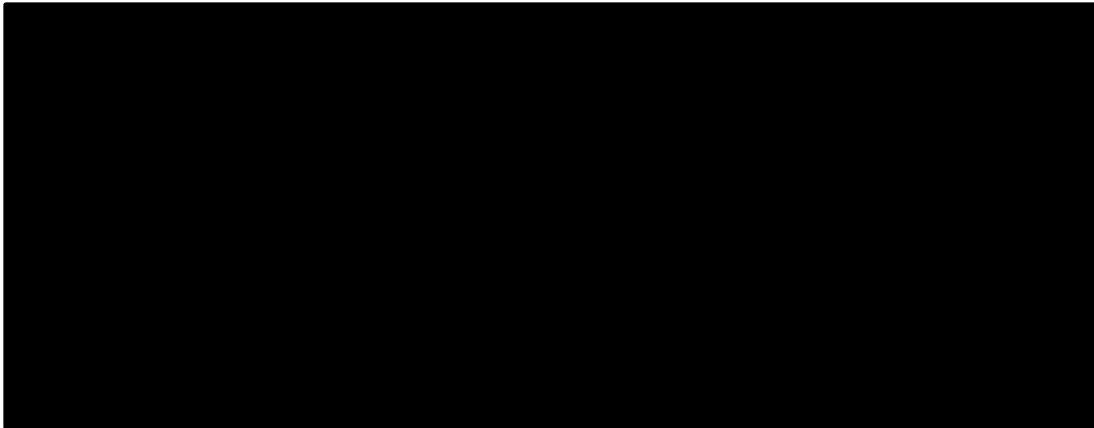




1 **Q. Why are BCC deliveries being reduced by approximately [REDACTED] tons from the**  
2 **amounts included in the Company's direct filing?**

3 A. The reduction is primarily associated with updates to BCC's underground mine plan.  
4 The mine plans for both BCC's surface and underground operations were updated in  
5 July 2014, two months after the Company's initial filing was submitted. The initial  
6 filing reflected deliveries based on the most recent BCC mine plan, which was  
7 finalized in October 2013.

8 The reduced coal deliveries from the surface and underground mines result  
9 from reduced coal production. As reflected in Confidential Table 3 below, the  
10 underground mine will produce [REDACTED] million tons less coal (PacifiCorp's share)  
11 during the pro forma period.



12 **Q. Is the reduced production and delivery of BCC underground coal expected to**  
13 **continue beyond the pro forma period in this case?**

14 A. Yes. The underground mine is projected to produce on average [REDACTED] million tons per  
15 year from 2015 through 2018, or [REDACTED] million tons for PacifiCorp's share. Compared  
16 to the mine plan prepared in October 2013, the underground mine plan will produce,

1 on average, over [REDACTED] tons (approximately [REDACTED] for PacifiCorp's share) less  
2 coal annually through 2018.

3 **Q. Please explain the production changes in the underground mine reflected in the**  
4 **July 2014 plan.**

5 A. There are three significant factors contributing to decreased underground production  
6 in the July 2014 plan:

7 • Reduction in continuous miner production shifts due to changes in workforce  
8 schedules for underground mine employees. The underground mine is now  
9 operating two 10-hour shifts, four days per week, compared to two 12-hour shifts,  
10 six days per week, in the October 2013 plan.

11 • A reduction in the amount of coal produced by the longwall system from [REDACTED]  
12 tons per shift in the October 2013 plan to approximately [REDACTED] tons per shift in  
13 the July 2014 plan.

14 • Shortening of the 15<sup>th</sup> right longwall panel.

15 **Q. Why did BCC change the workforce schedules for the underground mine**  
16 **employees?**

17 A. The underground mine has been unable to maintain two 12-hour shifts, six days per  
18 week, due to limited workforce availability. Since its inception, the BCC  
19 underground mine has experienced high turnover rates as underground miners have  
20 gained experience and pursued jobs in the trona<sup>3</sup> industry in Southwest Wyoming.  
21 The mine has relied heavily on contract mining services, such as Price Mine Service,  
22 to supplement the workforce. Despite the contract labor, BCC has been unable to

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<sup>3</sup> Trona is a sodium carbonate compound that is processed into soda ash or bicarbonate of soda, or baking soda.

1 sustain the continuous mining activity that is necessary to support longwall panel  
2 development. The revised workforce schedule allows the mine to fully staff two  
3 10-hour shifts, four days per week.

4 **Q. Why is the longwall production per shift being reduced in the July 2014 plan?**

5 A. Due to workforce shortages discussed above, the mine has been unable to sustain  
6 continuous miner development, which is essential to keep from idling the longwall  
7 system. The updated production rate allows the underground mine to balance  
8 advancement of the longwall system and continuous miner development; the steady  
9 rate of longwall production minimizes idling of the longwall and roof stability  
10 concerns.

11 **Q. Why is the 15<sup>th</sup> right longwall panel being shortened?**

12 A. The start-up point for the 15<sup>th</sup> right longwall panel was moved, shortening the panel  
13 length as a result of a fault encountered at the back of the panel and changes to the  
14 Bridger Coal underground ventilation plan mandated by the Mining Safety and  
15 Health Administration.

16 **Q. Are there any other factors contributing to the increased BCC costs?**

17 A. Yes. The reduced heat content of BCC underground coal increases coal prices  
18 approximately [REDACTED] million.

19 **Q. Please discuss the change in the heat content of BCC deliveries.**

20 A. In the Company's rebuttal, the heat content of BCC deliveries decreases from 9,301  
21 to 9,153 British thermal units (Btus) per pound of coal due to increased ash content of  
22 the underground mine. The geological modeling in the July 2014 plan was updated to  
23 reflect actual mining conditions in areas where the coal seam height is less than 10

1 feet. Since the longwall is not capable of mining below 10 feet without cutting the  
2 floor or roof, the ash content was increased by approximately two percent in these  
3 areas, which contributed to a lower Btu content of coal produced from the  
4 underground mine.

5 **REASONABLENESS OF BCC FUEL SUPPLY**

6 **Q. How does BCC pro forma period coal prices compare to other Southwest**  
7 **Wyoming coal supplies?**

8 A. Favorably. As discussed earlier in my testimony, BCC prices remain comparable to  
9 Black Butte. BCC coal is also less expensive than other Southwest Wyoming coal  
10 supply options. As part of its coal RFP in June 2014, the Bridger plant owners sought  
11 coal supplies from the other coal mines in Southwest Wyoming—Westmoreland’s  
12 Kemmerer mine and Kiewit Mining’s Haystack mine. [REDACTED]

13 [REDACTED] in response to the solicitation. [REDACTED]

14 [REDACTED]

15 [REDACTED] However, [REDACTED] the coal  
16 would need to be transported [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 **Q. Has the Company provided testimony in its last two Washington rate cases**  
21 **describing mining operations and costs at BCC?**

22 A. Yes. In Docket UE-111190, the Company provided extensive direct testimony on  
23 how the Company was managing coal quality at BCC. In the Company’s most recent

1 general rate case, Docket UE-130043, Boise White Paper, Inc. (Boise) argued that  
2 BCC coal should be re-priced at market prices. In response, the Company provided  
3 extensive rebuttal testimony on the reasonableness of BCC operations and costs. The  
4 Commission rejected Boise's adjustment in the final order in that case.

5 **COLSTRIP PLANT COST SUMMARY**

6 **Q. Please explain the coal price change for the Colstrip plant.**

7 A. The Colstrip plant is supplied by Western Energy's Rosebud mine. The rebuttal pro  
8 forma prices were based on Western Energy's 2015 Annual Operating Plan (AOP) for  
9 the Rosebud mine. The Colstrip costs included in the Company's direct filing  
10 reflected mining costs based on the 2014 AOP. Western Energy provided the  
11 Colstrip plant owners with the final 2015 AOP in October 2014. Updating pro forma  
12 coal expense to reflect the new AOP increases pro forma west control area NPC by  
13 approximately [REDACTED] million.

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

15 A. Yes.