Exh. JLB-8C
Docket UE-170717
Witness: Jason L. Ball
REDACTED VERSION

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PACIFIC POWER & LIGHT CO.,** **Respondent.**	**DOCKET UE-170717**

EXHIBIT TO
TESTIMONY OF

Jason L. Ball

STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

Confidential Testimony of Cindy A. Crane in Docket UE-140762

January 25, 2018

Confidential Per Protective Order in UTC Docket UE-140762
Exhibit No. CAC-1CT
Docket UE-140762 *et al.*
Witness: Cindy A. Crane

**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*)**
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)***
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

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

PURPOSE AND SUMMARY

Q. What is the purpose of your rebuttal testimony?

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

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

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

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

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

CHANGES TO BRIDGER PLANT COAL EXPENSE

Bridger Plant Cost Summary

Q. How does the Company fuel the Bridger plant?

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

Q. Please summarize the [redacted] million increase in pro forma coal prices associated with the Bridger plant coal supplies.

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

[redacted]

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

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

A. The total Black Butte volumes increased from [redacted] tons to [redacted] tons. In direct testimony, Black Butte provided [redacted] percent of the Bridger plant's coal needs; in rebuttal, Black Butte provides [redacted] percent.[2]

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

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

BCC Price and Volume Update

Q. Please describe the increased BCC prices.

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

[2] 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.

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

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

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

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

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

[redacted]

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

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

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

[redacted]

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

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

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

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

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

- Reduction in continuous miner production shifts due to changes in workforce schedules for underground mine employees. The underground mine is now operating two 10-hour shifts, four days per week, compared to two 12-hour shifts, six days per week, in the October 2013 plan.
- A reduction in the amount of coal produced by the longwall system from [redacted] tons per shift in the October 2013 plan to approximately [redacted] tons per shift in the July 2014 plan.
- Shortening of the 15th right longwall panel.

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

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

[3] Trona is a sodium carbonate compound that is processed into soda ash or bicarbonate of soda, or baking soda.

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

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

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

Q. Why is the 15th right longwall panel being shortened?

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

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

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

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

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

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

REASONABLENESS OF BCC FUEL SUPPLY

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

A. Favorably. As discussed earlier in my testimony, BCC prices remain comparable to Black Butte. BCC coal is also less expensive than other Southwest Wyoming coal supply options. As part of its coal RFP in June 2014, the Bridger plant owners sought coal supplies from the other coal mines in Southwest Wyoming—Westmoreland's Kemmerer mine and Kiewit Mining's Haystack mine. [redacted] in response to the solicitation. [redacted] However, [redacted] the coal would need to be transported [redacted]

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

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

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

COLSTRIP PLANT COST SUMMARY

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

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

Q. Does this conclude your rebuttal testimony?

A. Yes.